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REPORT RESUMES

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A STUDY OF SCHOOL CLASSROOM BEHAVIOR FROM DIVERSE EVALUATIVE FRAMEWORKS--DEVELOPMENTAL, MENTAL HEALTH, SUBSTANTIVE LEARNING, AND GROUP PROCESS.

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THE OBJECTIVE WAS TO DETERMINE HOW A PARTICULAR CLASSROOM BEHAVIOR WOULD APPEAR WHEN IT WAS VIEWED FROM FOUR EVALUATIVE FRAMEWORKS--DEVELOPMENTAL, MENTAL HEALTH, SUBSTANTIVE LEARNING, AND GROUP PROCESS. THE FIRST STAGE WAS DEVOTED TO THE DEVELOPMENT OF FOUR SCHEDULES FOR USE IN SIMULTANEOUS OBSERVATION OF THE SAME SAMPLE OF CLASSROOM BEHAVIOR. IN STAGE TWO REPRESENTATIVES FROM EDUCATION, PSYCHIATRY, PSYCHOLOGY, AND SOCIOLOGY MET TO CLARIFY THE POSITIONS TO BE STUDIED. IN THE THIRD STAGE, GRADUATE STUDENTS WERE TRAINED IN OBSERVATIONAL TECHNIQUES AND COLLECTED OBSERVATIONAL DATA IN ELEMENTARY AND SECONDARY SCHOOL CLASSROOMS. DURING STAGE FOUR AN ANALYSIS OF THESE DATA WAS MADE AND THE OBSERVATIONAL SCHEDULES WERE REWORKED FOR UTILIZATION IN STAGE FIVE, WHICH WAS A DUPLICATION OF STAGE THREE. THE FINAL STAGE CONSISTED OF AN ANALYSIS OF THE NEW DATA AND PREPARATION OF THE FINAL REPORT. THE FIRST PUPIL QUESTIONNAIRES WERE ENCOURAGING IN MANY WAYS. IT WAS OF SOME SURPRISE THAT INDEXES COULD SPAN THE GRADE LEVELS ATTEMPTED IN THIS STUDY AS WELL AS THEY APPEAR TO HAVE DONE. THE DETAILED STATISTICAL ANALYSIS OF THE PUPIL RESPONSES WAS SUCH AN EXTENSIVE MATTER THAT IT WAS REFERRED TO AS AN AREA UNDER INDEPENDENT STUDY. OVERALL, WITH THE EXCEPTION OF THE DEVELOPMENTAL STAGE, WHICH WAS MORE DIFFICULT TO INSTRUMENT, IT APPEARS THAT THESE EVALUATIVE FRAMEWORKS ARE IMPORTANT ONES AND ONES ON WHICH USEFUL PUPIL DATA CAN BE OBTAINED. (JL)

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The University of Michigan
School of Education
Ann Arbor Michigan

SCHOOL CLASSROOM BEHAVIOR

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A Study of School Classroom Behavior from Diverse Evaluative Frameworks : Developmental, Mental Health, Substantive Learning, Group Process.

William C. Morse
Richard Bloom
James Dunn

November 1, 1961

Participating Committee

Finley Carpenter
Warren Ketcham
Ronald Lippitt
Wilbert McKeachie
Howard McClusky
Allen Menlo
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The research reported herein was performed pursuant to a contract with the United States Office of Education, Department of Health, Education, and Welfare.

Contract USOE #SAE 8414

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PREFACE

Some years prior to the start of this research, a committee of the American Psychological Association had been working on the development of a school classroom taxonomy. A sub-study group was operative on the University of Michigan campus. After two years of general effort the study group proposed this field project.

University of Michigan faculty members were instrumental in instigating the project and developing the theoretical positions. These persons served as participants and consultants throughout the project:

Finley Carpenter, Assistant Professor of Education

Warren Ketcham, Professor of Education

Ronald Lippitt, Professor of Psychology and Sociology

Wilbert McKeachie, Professor of Psychology

Howard Y. McClusky, Professor of Educational Psychology

Allan Menlo, Assistant Professor of Education

William C. Morse, Professor of Educational Psychology

William C. Trow, Professor of Education and of Psychology

These psychologists represent a wide gamut of interests from classroom learning theory to mental health. After the initial year of joint effort by all members of the group, the participants contributed in specialized ways. Finley Carpenter directed the analysis of the pilot data in the summer of 1960. Committee members gave consultation on matters in the areas of their competencies during the conduct of the field work. While the committee did not write the final document, the material embodies conceptualizations and insights of all committee members.

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The project director bears the responsibility for the operational decisions and the final report. It is recognized that committee members may have interpretations at variance with those in this document. Subsequent specialized reports and further studies by committee members will be facilitated by the bank of data now available for machine processing.

The research assistants in this project were Richard Bloom and James Dunn. They have been persistent and creative in their work, and have devoted their energy far beyond their formal obligation.

Project Director
William Morse
September 30, 1961

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I THE PROJECT GENESIS AND DEVELOPMENT

THEORETICAL CONSIDERATIONS AND GENERAL GOALS OF THE PROJECT

Two rather separate areas of interest influenced the formulation of this research. First, a committee of University of Michigan psychologists gave several years attention to the development of a classroom taxonomy. The thought was, many researches on classroom process could be interrelated if clarification of terminology within a comprehensive set of categories could be accomplished. Second, the committee was concerned about the current conflict between so called "adjustment" and "substantive" advocates in defining the proper conduct of learning in the public school classroom. If classroom process could be systematically categorized, might it not be possible to analyze certain styles of classroom functioning and thereby relate substance to the value judgments expressed about educational matters?

It was clear that, at the present state of understanding, a comprehensive taxonomy cataloguing all classroom situations and transactions would be as unwieldly as the classroom it was meant to simulate. In moving from the encyclopedic approach toward emphasizing only the critical and determining aspects of classroom situations, one is faced with the problem of selection of significant items on a theoretical rather than fortuitous basis. A follower of Skinner might not have primary interest in the same set of items as a follower of Prescott. This raised the interesting question: What could a 'point of view' do to the development of a classroom taxonomy? There are definite implications embedded in the various viewpoints now prominent in educational psychology. These diverse psychological viewpoints to some extent parallel philosophical arguments currently being made for one or another classroom design. Those individuals emphasizing content learning above all else in the classroom, appear to find certain psychological postures most engaging while those who hold life adjustment as their goal, tend to look elsewhere for psychological succorance.

In view of this, it seemed desirable to study the different approaches to classroom design dictated by the different viewpoints in educational psychology. What aspects of the total taxonomy would be most prominent when a classroom is viewed from a given specific theoretical position? The key question led to the formulation of this study:

> "A study of school classroom behavior from diverse evaluative frameworks: developmental, mental health, substantive learning, and group process."

The theoretical position inherent in each viewpoint selects and orders the importance of elements in the total panorama of classroom events. Four currently active points of view were identified: (1) the developmental or growth emphasis; (2) the mental health or adjustment emphasis; (3) the content or substantive learning emphasis; (4) the group process or group dynamics emphasis. The goal was to so order the items of classroom assessment that it would be possible to appreciate the degree to which a classroom is saturated with any or all of the four theoretical emphases.

Many interesting propositions can be explored from data collected in such a format. A few general ones will be stated here though they will be set up in specific terms at appropriate junctures in this report. Will classes differ significantly in the relative saturation of the four theoretical positions chosen for study? Will there be age and sex patterns? Will pupils, teacher and observers be coherent in their appraisals of given conditions? Will the classroom with high concentration in content learning, for instance, show less evidence of mental health? Do all vectors co-exist at a high level or is the presence of one accompanied by a decrease in another, even though the scaling devices permit otherwise? Will classroom patterns be idiosyncratic and negate generalization?

While the present operation is certainly most modest in view of the vastness of the problem, certain issues can be clarified and the potential value of this approach indicated.

THE FOUR THEORETICAL POSITIONS

Viewpoints are just that: vague statements of position with logical significance and overall generalization. The first task was to distil each position and extract the discrete, non-overlapping characteristics essential to each. The committee contained experts in several of the positions. Additional advocates of particular points of view were also consulted.

While there were many advocates of each of the four theories under study, the essence of each theory was hard to come by and harder still to put into concrete, specific terms so that some sample could be taken of its presence or absence in a classroom situation.[1] There were three methodological problems. First, a sound theoretical basis had to be established. This involved the specification of the basic theoretical concepts germane to the theory in question. Second, behavioral classroom counter-parts of the theory had to be isolated and specified. Third, assessment devices or instruments had to be developed. From data thus obtained one infers the extent to which the processes in a given classroom adhere to a given theoretical position.

The initial task, then, was the development of the content for the four specific theoretical positions. Clarifying the positions was made difficult by the fact that proponents of viewpoints do not always cast their concepts in classroom terms. Then, too, when applied to classroom phenomena, a given position often becomes so diffuse that the generic point of view dissolves and becomes flavor rather than substance. The literature relevant to the four theories was surveyed and lists of concepts were compiled. The dominant features of each theory were then considered the basic concepts for a given frame of reference.

The four positions differed widely in theoretical refinement. On the one hand, there has been a long history of concientious effort applied to the learning process. While mental health and developmental positions contain general propositions, they tend to lack specific, concrete items to test concepts associated with the positions.

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[1] A great deal of the literature surveyed for this purpose was of low yield. For this reason, the extensive list of materials reviewed is not included in this report. We were greatly aided and by the excellent work of Withall, John, "Research Tools: Observing and Recording Behavior." Review of Educational Research, Dec. 1960. Vol. XXX No. 5, 496-512.

Every effort was made to avoid value judgments regarding the relative merit of any position. In formulating the specific dimensions falling within a theoretical position, the goal was not to evaluate classrooms along these dimensions but simply to determine the extent to which classrooms varied in the degree of saturation or presence of phenomena classified according to these dimensions. A brief presentation of the four theoretical frames of reference is now in order. It should be noted that a theoretical position is comprised of several sub-parts. The sub-parts are classified as dimensions: each set of dimensions combines to form one of the four index scores.

Developmental Frame of Reference

In education, the developmental position emphasizes such variables as growth, appetite, readiness, capacity and differentiation. Variability in rate and extent of maturation is the key-note, and the concept of individual differences is the construct which embodies the primary emphasis of this theoretical posture.[1] Individual differences in physical, intellectual, and social-emotional characteristics pervade the developmental approach.

Thus the problem is one of determining to what extent the design and conduct of the classroom reflects awareness of, concern for, and attempts to meet individual growth differences. Because growth phenomena are non manipulative, this position does not posit a clear series of variables which are assumed to be functionally related in a cause-to-effect fashion. The state of affairs which adds up to a classroom emphasizing developmental theory may be quite diverse and hence evasive.

Developmental theory was reduced to two primary foci. One is the theoretical conceptualization of individual differences; the other is the methodological condition subsumed under the concept of self selection. Thus, the two dimensions, provision for individual differences and self selection, constitute the essence of the developmental frame of reference and high scores on these dimensions indicate a strong developmental stance within the classroom.

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[1] Olson, Willard C. Child Development, Boston; Heath and Co., 1959.

Individual Differences. Individual differences constitute a fundamental issue in developmental theory. In the present research the attempt is to describe the extent to which the classroom accomodates a wide variety of individual pupils. Individualization of teaching methods and assignments, as well as multi-level content presentation and differential expectations and requirements of pupils, are integral to this concept. A flexible and individualized total instructional methodology is anticipated as a means of meeting individual pupil variance. A high score on this dimension indicates a classroom saturated with this quality.

Self Selection. The problem of individualization is related to the concept of self selection. Terms such as developmental tasks, needs, appetites, and developmental necessities have been used by various authors to refer to specific growth requirements of individuals. The developmental educational psychologist emphasizes that the various needs of the individual, whether they be physical, intellectual or social, are idiosyncratic. Their demands are best met by allowing the individual's selective appetite to function. Hence the concept of self selection emerges. Theoretically then, the best way to provide individualized school programs is to permit pupils to select those aspects of the total school environment that most suit their specific need structures and appease their "appetites". This allows the pupil to exercise and even contribute to his uniqueness through selective pursuit of given academic and social situations in the classroom. A high score on this dimension indicates a classroom which exhibits high saturation in self selection processes.

Learning Frame of Reference

While the problem in the developmental position was to find the unique content, the problem in learning was to winnow common ground from the myriad of learning theories. This position is not derived from any one source, but is the result of much spade work and final evaluation by the committee. The items making up the Learning Index were organized into four dimensions as follows.

Motivation. Motivation subsumes such concepts as goal expectancy, valence, drive and needs. Here the saturated end would represent high pupil interest and positive involvement in school work. Pupils would consider school work important and would be willing to work hard.

Content Input. A high score on this dimension reflects a recognized program of content presentation executed in a clear fashion and at a rate which can be absorbed. Appropriately presented, content will be meaningful and understood. Counter indications include ambiguity of the task and interruptions.

Pupil Activity. Under the conditions of this study it was impossible to measure pupil skill or knowledge gain. At first considerable effort was expended in attempting to organize such categories as writing, reciting, studying, reading, listening, watching a film, etc. But, lists of specific acts seemed less usable than an attempt to get at the qualitative assessment of learning related phonomena. For this reason such pivotal questions as the following were posed: Were the pupils going about feasible tasks with industry and without undue distraction, leaving the field or failure? To what extent were they actively involved in task relevant behavior, regardless of the specific form of the activity? High saturation would expect task relevant behavior, a lack of distraction, and intense task involvement.

Feedback. An intensive learning climate should embody some form of response evaluation and informational feedback to the respondent, in the form of reward and reinforcement or some other feedback process. An attempt was made to assess the amount, nature, and speed of feedback in the classroom. In addition, the pupil freedom to seek further feedback was studied.

The Mental Health Frame of Reference [1]

The three dimensions which make up the Mental Health Index are considered as descriptive or symptomatic rather than a causal explanation of classroom mental health.

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[1] Considerable help was found in the whole issue of The Journal of Social Issues, Vol. XV, No. 1, 1959 "Mental Health in the Classroom". Much of the final material is close to Menlo, A. "Mental Health Within the Classroom Group". University of Michigan, School of Education Bulletin. XXXI (May, 1960), 121-124.

Acceptance. High Scores indicate supportive behavior between individuals; low scores reflect negative affect, but not to the point of overt aggression or open threat. In this dimension two acceptance relationships are sampled: (1) pupil-pupil affect (2) teacher-pupil affect.

Aggression. This aspect of classroom mental health deals with the active or passive movement against others in terms of actual fighting or threats. Only the pupil-pupil relationships are sampled, low scores being positive.

Anxiety. It is a truism that classrooms differ in the amount of school related anxiety they arouse. The anxiety might be activated by a variety of sources such as the teacher, subject matter, peer relationship and so on. The interest here was not in the source, but the presence or absence of threatening or unpleasant internal feeling associated with the classroom. The pupil may perceive varying degrees of discomfort, tension or fear.

In summary, high saturation on the classroom Mental Health Index occurs when anxiety is low and there are minimal occurrences of interpersonal aggression, and high interpersonal acceptance within the class.

Group Process Frame of Reference [1]

In many ways, the group process position proved most difficult to assemble. The objective, as in the other positions, was to select dimensions which would indicate the extent to which a class is saturated with conditions reflecting this theoretical approach. Obviously all classroom groups embody group processes which reflect both qualitative and quantitative differences. Since much current research in classroom group dynamics involves an explicit or implicit value assessment on the desirability of democratic processes within a group, it was difficult to escape the implication of this evaluative aspect in our assessment.

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1. The National Society for the Study of Education, Fifty-Ninth Yearbook, part II, Dynamics of Instructional Groups, 1960, was a major source. Professor Ronald Lippitt led in the formulation of these constructs.

The following four dimensions are representative of the current trends in group psychology and comprise the present assessment in the Group Process Index.

Cohesiveness. Cohesiveness is the attractiveness the group has for its members and the forces acting upon a member to remain in his group. One can presume that this is, in turn, a consequence of need satisfaction associated with the group, but the present effort was only to assess the intensity of group attraction in a general or global sense.

Cooperativeness. Classroom goals may be achieved by independent or interdependent pupil acts. The focus here is the degree of inter-related, cooperative relationships which the classroom fosters.

Decision Making. While formalized classroom leadership resides in the teacher, there is considerable variation in pupil participation in decision making. This dimension deals with the extent to which the teacher distributes and shares leadership authority.

Ease of Communication. This dimension focuses on the ease with which pupils may informally interact and communicate with each other in the classroom. A low score indicates formalized communication patterns in which the teacher initiates communications with one or more class members. A high score on this dimension indicates class members are free to communicate with one another in variety of class activities without the formal intervention of the teacher. The basic property operative in this dimension is the degree of communicative accessibility between class members.

Group Norm Items

A somewhat separate approach was instituted around questions about the perceived group norm relative to the various conditions studied such as: Do the members see the class as valuing hard work, getting good grades, mutual acceptance and so on? Thus norms involve a group evaluative reaction toward types of behavior occurring in the class. Norms are conceived as evolving from group relationships, where there are implicit agreements among group members regarding the goodness or desirability of various classroom behaviors. These norms need not correspond to any class rules formally specified by the teacher.

The normative areas investigated deal with acceptance-rejection and cooperativeness between class members. Group norms related to other postures such as learning and mental health were also incorporated. These perceived group norms offer a "self-other" comparison possibility.

II INSTRUMENTATION

After determining the various theoretical positions, instrumentation was begun. This involved two interrelated procedures. The first was to determine specific behavioral processes which reflect the presence or absence of theory-relevent classroom practices. The second was to develop specific items to assess these behaviors.

Data were to be collected from three different sources: teacher, pupil and observer.

After experimenting with various projective and semi-projective methods, primary attention was given to the development of objective rating scales and multiple choice items, which referred to discrete behavioral incidents. Such a format allowed greater standardization in presentation, and obviated the problem of later response interpretation.[1]

A year was devoted to preliminary instrument construction, and pilot testing. Items that did not discriminate significantly between classrooms were eliminated or modified. Various styles of classroom observation were explored, ranging from non-interpretative tally counts of behavioral units to gross subjective evaluations. On the basis of several trial testings, a time sampling generalized rating scale, guided by an explanatory glossary of terms, was the final choice.

The battery used for final data collection included the following five instruments:

(1) Teacher Opinionnaire

(2) The Reality of Classroom Practice

(3) Teacher Questionnaire

(4) Pupil Questionnaire

(5) Observation Schedule

Samples of instruments are included as Appendix A.

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[1] The single exception is the Teacher Reality of Classroom Practice.

DESCRIPTION OF THE INSTRUMENTS

The Teacher Opinionnaire was a card sort task. Forty cards were presented in fixed random sequence to each teacher. Each card carried a single statement of a condition generally agreed to have importance for optimal classroom functioning. Items such as "Pupils feeling friendly to the teacher", "Organizing lessons so as to obtain miximum pupil activity" and "Pupils encouraging each other in their classwork" were used. The full list of items appears in the appendix. Each of the four theoretical positions was represented by ten items. The teacher was then asked to make four piles of ten cards each. Pile one was to contain those cards the teacher considered to be most important for an optimum class condition; pile two was to contain those cards which were quite important; pile three, of some importance; and pile four, of little or no importance.

This task forced the teacher to express a differential philosophy identifying him along the continuum for each of the four theoretical positions. A value profile, following in a general way some of the ideas presented by Cosgrove [1], could then be derived for each teacher.

The teacher was next asked to sort the cards into four piles again, except that this time as many cards as desired could be put in any pile. This aspect of the test was to determine whether or not, given free choice, the same balance of identification would maintain for the four positions and whether or not the intensity of belief would change.

Due to the large number of rather difficult decisions, this task was the most arduous for the teacher and required upwards of an hour to complete in some cases.

The Reality of Classroom Practice was the second teacher instrument. A frequent criticism expressed by teachers is, "Theory is nice but you can't always follow theory in actual practice." This instrument was designed to measure how the teacher, under actual working conditions, found himself operating. The compromise of reality was presented to induce honest responses. Sixteen problem situations were presented, and each was of the type which teachers frequently encounter. There were four for each of the four theoretical positions. The teacher was asked to respond how he has or would, handle the situation in light of the actual situation in which he has to operate. Such items as "You see a pupil who is not doing the assignment he is supposed to be doing. How do you deal with this situation?" were used. It took about 30 minutes to execute this instrument. A copy appears in the appendix.

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[1] Cosgrove, D.J. "Diagnostic Rating of Teacher Performance" J. of Educational Psychology, Vol. 50, No. 5., 1959, 200-204.

The Teacher Questionnaire was composed of two parts and was designed to measure the teacher's perceptions of various aspects of the particular class now being taught. Form A and Form B consisted of multiple choice questions referring to specific classroom events or behaviors. Many of the items were directly comparable to those in the pupil questionnaires and were also dimensionally related to the observation forms. This was to allow cross comparison of similar data collected from the various data sources. In addition, Form B requested certain demographic data regarding the teacher. These data involved such questions as age, sex, marital status, experience, etc. The teacher answered these questionnaires at the same time the pupils answered theirs but in a different place while the experimenter worked with the class. It took teachers approximately twenty minutes total to answer both forms. Both forms are presented in the appendix.

The Pupil Questionnaire was the major instrument. A basic assumption behind the use of this instrument is that pupils can provide useful and valid information about classroom events. This is in addition to the fact that, being the ultimate consumers, what pupils perceive is of utmost importance. Antecedent studies encouraged our acceptance of pupil perceptions as one important and discriminating source of data concerning teacher and classroom.[1]

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[1] Dixon, W.R. and Morse, W.C. "The Prediction of Teaching Performance: Empathic Potential." Jo. of Teacher Education Vol. XII, No. 3 (September 1961), 322-329.
(footnote continued on page 13).

The pupil questionnaire consisted of Forms A and B. The items were organized around nineteen dimensions, and finally compiled into the four indexes: Learning, Group, Mental Health and Developmental. Each form took thirty to forty minutes to administer. They were usually executed on successive days. The entire questionnaire was read aloud by the administrator to minimize reading difficulties. This procedure was used at all grade levels. Frequent changes in format and style were used to maintain pupil interest, and to minimize response set. There were six sub-sections in each form.

The original intent was to construct two equivalent forms from which reliability data could be obtained. Research reported by Sarason warned us to abandon the procedure.[1] He found that defensiveness toward emotionally focused scales increases when there is a time interval separating administrations. Because of this, all items dealing with anxiety, teacher-acceptance, and classroom relationships were placed in one form and the less sensitive material was distributed over both forms.

The pupil questionnaire items were newly constructed with the one exception of a modification of the classroom anxiety items developed by Sarason and his group.[2]

(continued from page 12)
Amatora, Sister Mary, "Can Elementary Children Discriminate Certain Traits in Their Teachers?" Child Development XXIII No. 1 (March 1952), 75-80. (This is one of several studies by this author.)

Medley, D.M. "Teacher Personality and Teacher-Pupil Rapport" Jo. Teacher Education, June, 1961, Vol VII, No. 2, 152-185.

1. Sarason, S.B., Davidson, K.S., Lighthall, F.F., Wait, R.R., and Ruebush, B.K. Anxiety in Elementary School Children. N.Y. John Wiley and Sons, Inc. 1960.
2. Dr. Keneth Davison extended to Dr. Elton McNeil permission to make use of these items in a series of studies, including the present work.

Criteria for item selection deserves attention. Not all of the pupil questionnaire items tried were used in the final dimension scores. Items were included on the basis of the following criteria: Lack of ambiguity in wording; face validity as related to the theoretical construct; and the production of a relatively broad distribution of responses.

In considering items for a dimension, items negatively correlated with others were eliminated. It is possible that the various theory dimensions may, indeed, consist of more than one continuum of behavior. Thus, certain items may be measuring one aspect of a dimension relevant behavior while the general group of other items may be measuring another. Such a condition would result in occasional low correlations between certain items included in a dimension. For this reason certain items with high face validiy might be included in a dimension even though they had only low positive or even zero intercorrelations.

To evaluate and select items for the various dimension scores for this research, a 300 pupil random sample from the total 708 pupil sample was selected. Each grade was represented by 100 pupils, divided approximately equally between the sexes. Response distribution and intercorrelations, were studied item by item. This formed the basis for the empirical selection of the items finally used for the computation of indexes. The final selection of items is indicated in the appendix. There was considerable variation in the magnitude of the intercorrelations between items comprising each of the several dimensions. For example, items which focused on anxiety had a modal intercorrelation of +.62 whereas the individual differences score utilized items which correlated in the range of .00 to +.30.

Item reliability has been the subject of much study. Sarason[1] reports test-retest correlations ranging from .55 to .78 for his school anxiety items. Morse and Dixon[2] report a high school reliability coefficient of .92. Similar questions on the My Class Inventory gave a reliability score of .89.[3]

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[1] Sarason, op. cit. page 301.

[2] Morse and Dixon, op. cit. page 325.

[3] Medley, D.M. and Klein, A.A. "Measuring Classroom Behavior with a Pupil-reaction Inventory." Elem. Sch. Jo. 1957, Vol. 57, 315-319.

In the present study, certain comparable but not identical questions were included in both Form A and B. The test-retest reliability on such items runs as high as .60 regarding difficulty of school work, is in the .50's regarding motivation and individual differences, and drops to the .40's in other areas. There are a few instances in the .20's or so but this may mean the questions were ambiguous. The logical generalization is to say that reliability varies according to how objectively the pupil can perceive the class, which may differ in various areas. Since many items are like or identical with those in studies reporting very high reliability, it is presumed these would be at least acceptable.

The Observational Schedule. The original expectation for observation was to use a modified form of the OSCAR.[1] Problems of reliability and validity accompanying a new instrument would thus be avoided. A factor analysis of data obtained from the OSCAR yielded three factors: emotional climate; verbal learning and teacher oriented social structure. A study since completed,[2] raised questions as to whether or not the factors suit the intention of the present project. One factor of emotional climate did correspond roughly to the mental hygiene viewpoint in this study. However, even here the psychological conditions were inferred from the observed items of behavior. Morrison found many observational items related to factors but, in combinations, quite different from the psychological positions explored in the present study.

In the end we found that the OSCAR required observational time beyond our command. In trial use, attempts to simplify the categories and rework them into the four indexes did not prove feasible. Faced with the limited resources, another approach was necessary.

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1. Medley, D.M. and Mitzel, H.E. "A Technique for Measuring Classroom Behavior." Jo. Educational Psychology, 1958 Vol. 49,86-92.
2. Morrison, Virginia, B The Relationship of Student Teacher Performance and Pupil Performance to Supervisory and Pupil Merit Rating. PhD Thesis, University of Michigan, 1961.

Rather than collecting behavior observations and making the inference later as to the psychological implication, it was decided to have the observer make psychological inferences directly. Ryans[1] was able to accomplish this, although he was interested in the nature and behavior of teachers rather than the totality of classroom transactions. He did however, report observations of pupil behaviors such as 'apathetic-alert' and 'dependent-initiating'. At any rate he found it was possible for trained raters to make reliable appraisals of general psychological phenomena similar to those desired in the present study, and his procedures were used as guide lines. Ryans' reliability checks of various types suggest adequate reliability, though not comparable in all observational areas. Kowatrakul[2] reports reliability scores from .80 to .99 in observing student behavior in categories some of which are similar to those used here, though his focus was on individual pupils rather than the whole classroom.

The device used in this study is, in general, comparable to that of Ryans, with strengths and weaknesses similar to those so painstakingly reported in the volume indicated. Part of our special interest in this device was to find out how information collected on global dimensions in a brief time-sample observation compared to direct information from the teachers and pupils themselves.

The observation schedule was used by psychologically trained graduate students with teaching experience. The observer entered the classroom as inconspicuously as possible and took a seat in the rear of the room. Teachers had previously been briefed as to the procedure but not as to the time of observation, and were asked to ignore the entrance of the visitor as much as possible so as to minimize disturbance of the classroom routine. Five minutes were allowed by the observer for the effects of his entrance to dissipate. After this period, the psychologist observed the class ror a five minute interval, then the observation schedule was filled out.

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1. Ryans, D.G. Characteristics of Teachers. Am. Council on Education. Washington, D.C., 1960.

2. Kowatrakul, S. "Some Behaviors of Elementary School Children Related to Classroom Activities and Subject Areas." Jo. of Educational Psychology, Vol. 50, No. 3, 1959, 121-128.

Global ratings on a five point scale were made on various aspects of the four theoretical dimensions. The observer then observed for a second five minute interval and made ratings of the second time interval. The process was repeated a day or two later. This provided a total of four observations per class. At the ninth grade level, classes were conducted on a platoon system and observation for one day, 2 five minute intervals, was considered sufficient.

III METHODOLOGY AND RESULTS

The Sample

The objective of this project is to explore the feasibility of assessing significant aspects of classroom operation in a manner requiring a minimum amount of time and with devices which would be used over a broad range of grade levels and various school settings. To the latter end divergent sub samples were purposely selected. Half of the information was obtained in an uppermiddle class white suburb of Detroit. This portion of the data will be designated sub-sample A. Related research[1] has established the fact that this school-community places much emphasis on academic achievement. The mental ability of this group is well above the national average.

The other half, sub-sample B, was drawn from the core-area of Detroit, an area classified as culturally and economically deprived and participating in the Great Cities School Improvement Program.[2] This sample was of mixed racial and ethnic background. Pupil school achievement tended to slip behind grade after grade.

If items could be constructed which would function satisfactorily over such a range, the instruments would be more likely to be useful in a variety of classrooms in the future. This present research is concerned with the overall picture, but subsequent studies are underway to examine class and sex differences as well as details of genetic differences.

The total sample for this study consists of 708 pupils in 30 classes, ten classes each at grade levels V, VII and IX. All fifth grade data was collected in self contained classrooms. Seventh grade in sub-sample A was the first of a two year junior high school and the setting was the "core" class where the pupils remained with the same teacher for a double period of English-social studies time. The seventh grade data in subsample B was a self contained classroom and the last year of an elementary school situation. All ninth grade classes (in subsample B) were in the last year of a three year junior high school

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[1] Lowther, M. A Comparison of the Educational Motivation Self-Evaluation and Classroom Conduct of High and Low Achieving Eight Grade Students. PhD. Thesis, University of Michigan, 1960.

[2] The members of the Detroit Project of this Program were most cooperative in this work. We anticipate collaboration in future use of the scales for further research.

Additional data were also collected on 35 classes in school district A as part of a related research project.[1]

The following table summarizes the characteristics of the sample. It is to be noted that for some grade levels fewer teachers than classes are listed. This is due to the fact that several teachers taught two different classes. Thus, while the class N equals 30 the teacher N only equals 24.

TABLE ONE

CHARACTERISTICS OF SAMPLE

Grade	Sample	No. Classes	No. Teachers	No. Pupils		
				M	F	Total
V	A	5	5	78	58	136
	B	5	3	65	67	132
				143	125	268
VII	A	5	5	53	59	112
	B	5	3	58	48	106
				111	107	218
IX	A	5	4	56	49	105
	B	5	4	52	65	117
				108	114	222
Totals		30	24	362	346	708

Since the teacher responses constituted part of the study it was essential the confidentiality of responses be protected at the onset. A code known only to the teacher was used to insure anonymity. The data were further coded so that later feedback to the teacher requires a request and an identity code number from the given teacher. While grade level and sub-sample identification were provided, no individual teacher or school could be recognized. No school authorities had access to or will have access to any information concerning specific individuals. The effort spent to insure the teacher's protection was reflected in the overall teacher willingness to participate. This willingness was also due to the fact that the teachers recognized that such classroom oriented research is closely related to their own professional problems.

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[1] The Michigan Mental Health Society, School Mental Health Project.

No teacher received any results while the pupils in his class were still in his charge. A special form was devised to report back to the teacher summated class scores on the various dimensions. Individual pupil scores were not divulged.

Pupils were also assured of anonymity. The University researcher collected the forms immediately upon their completion while the teacher was still out of the room. Time was spent at the beginning of each session to orient the pupils to the task. This effort, by and large, resulted in serious participation on their part.

NORMATIVE RESULTS

The logical first question is: How did the instruments function and what problems arose in obtaining scores for the subsequent correlations? This normative data is essential for the interpretation of subsequent manipulations as well as a guide for others who may consider using the scales. First, the reader will be given information concerning each instrument and the derivation of scores.

Teacher Opinionnaire. The scoring of the teacher card sort general classroom practice responses is delt with in a detailed special report prepared by Dorothy Gier[1], and the reader interested in details is advised to consult this document. For the card sort task, the Teacher Opinionnaire, the correlations of forced and free sorts (N=44) ranged from +.99 to +.23, with an average of +.65. However, several teachers handled the free sort by putting all cards in one pile, or by other methods which suggested a lack of discernment. Hence, only the forced choice scores were used. In a study of the items, it was found that each of the four positions is represented by a similar pattern of response, some items of each being selected most frequently and some least. However, the teachers do not consider the four indexes (as represented by the 10 items each) of equal weight, for mental health is highest, development and learning median and group process least important. Whether this is due to the scale or to the sample or both is an open question.

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[1] Gier, Dorothy, The Relationship of Teacher Ideology and Classroom Practice. Thesis in partial completion of requirements for Specialist Degree, University of Michigan, 1961.

As indicated, the card sort Teacher Opinionnaire was scored only on the forced choice basis. Each card represented a theoretical position. If that card was placed in pile one (most important) it was scored four points; if it was placed in pile two (quite important) it was scored three points; if in pile three (some importance) it was scored one point. The total number of points for each theoretical position was then calculated. This figure constituted the teacher's index score for that position. It should be recalled once more that these ratings are not independent.

The following table summarizes the normative results, by means and standard deviations, of the scores on this instrument.

The possible range for any index is 0-40. The actual range for learning was 16-32, for developmental 22-33, for mental health 22-31 and for group process was 13-26.

Seventh grade teachers consistently exhibit greater variability of response in all of the theoretical positions. There is a remarkable similarity across grades within any given theory; the differences between grades are not significant which permits the sample of teachers to be included as one group, regardless of grade. The learning, development and mental health emphases are quite similar, but group process scores are significantly lower. This inequality of response is taken care of by the use of standard scores for each index.

TABLE TWO

TEACHER OPINIONNAIRE

Means and Standard Deviations of Index Scores by Grade

Grade	Learning		Development		Mental Health		Group Processes	
	X	SD	X	SD	X	SD	X	SD
V n=8	26.4	3.35	25.6	2.04	26.2	2.28	21.8	2.44
VII n=8	26.0	4.53	26.2	2.63	26.8	2.39	21.0	4.21
IX n=6	25.5	2.14	25.5	2.43	27.5	2.22	21.5	2.13
TOTAL	26.0	3.59	25.8	2.19	26.8	2.33	21.4	3.16

Teacher Reality of Classroom Practice. Gier's study reports in detail the difficulties of scoring the semi-projective The Reality of Classroom Practice. Several proposed methods of scoring failed to yield high enough interrater reliability. This instrument was constructed so that each position was represented by the four hypothetical classroom situations but each situation produced responces across all theoretical positions regardless of the original orientation of the situation. Responses were scored on dimension without regard to stimulus set.

The first response from each question was dropped and all subsequent responses were judged without regard for their sequential position. Rater reliability ranged from +.65 to +.84 for these indexes.

By grade level, only the developmental position showed a significant variation and here only at the 9th grade. In totals, the learning vector received highest emphasis, followed by mental health, group processes, and finally the developmental. The differences between index emphasis were significant.

TABLE THREE

REALITY OF CLASSROOM PRACTICE

Means and Standard Deviations of Index Scores by Grade

Grade	Learning		Development		Mental Health		Group Process	
	X	SD	X	SD	X	SD	X	SD
V	4.9	4.36	1.3	.25	4.0	2.20	3.4	2.78
VII	5.1	2.87	1.4	.93	3.1	2.48	3.9	2.78
IX	4.8	2.50	3.0	2.05	5.7	4.50	5.0	2.04
TOTAL	5.0	3.06	1.8	1.63	4.1	3.03	4.0	2.44

The range of scores is not fixed in this instrument and depends entirely on the responses. In actuality the ranges obtained were as follows: 0-7 for developmental; 0-9 for group 0-15 for learning and 0-11 for mental health.

The remaining problem in obtaining score distributions was the verbosity difference. Some teachers made many responses, some few. In toto, the individual teacher response range was 1 to 34. So that each person was weighted equally in the scoring, the subject's final index scores were on a percentage basis. This was the ratio of the index score to the total number of responses each individual made. T scores were derived for each index from these percentage distributions.

Teacher Questionnaire. Several scores, parallel to the scores derived for the Observation Schedule and Pupil Questionnaires were obtained from the Teacher Questionnaires. Each response was assigned a numerical value and these values were summated over the items of each dimension. These summated scores were then divided by the number of items in that dimension to which the teacher responded. This then yielded a mean response score for each dimension. The items comprising each dimension are indicated on the Teacher

Questionnaire in the appendix. The dimension scores within each theoretical position were then summated and divided by the number of dimensions in each respective theory. This then gave a mean theory index score.

Table Four summarizes the means and standard deviations of the four indexes, by grade level.

TABLE FOUR

TEACHER QUESTIONNAIRE

Means and Standrad Deviations of Index Scores by Grade

Grade	Learning		Development		Mental Health		Group Process	
	X	SD	X	SD	X	SD	X	SD
V	4.61	.53	4.48	.67	7.60	1.28	3.00	.79
VII	4.85	.48	4.71	.48	7.50	1.12	2.07	.54
IX	5.30	1.18	3.90	.82	7.10	1.37	2.95	.49
TOTAL	4.92	.85	4.36	.87	7.40	1.26	3.01	.57

The possible and the obtained ranges of the index scores are as follows: Learning Index, possible 1-8, actual 3.6-7.3; Mental Health Index, possible 1-12, actual 5-10; Developmental Index, possible 1-8, actual 3.1 to 5.8; Group Index, possible 1-4, actual 1.5 to 4.0. It should be noted that, in combining various dimensions to compose an index, the variability is attentuated, and certain individual discriptive material is lost. Actually, the indexes show remarkable stability from grade to grade. The differences are not significant. For this reason the 30 classes can be considered one distribution. The internal nature of the variation of the dimensions is the subject of separate study for it may well be that the grade level similarities are a result of shifting and counter shifting of parts within a broad area. Standard scores, in this instance Z scores, were computed for each distribution.

Pupil Questionnaire. Pupil responses for the thirty classrooms were obtained on the Pupil Questionnaires as previously described. Nineteen dimension scores, each a component of an index for a theoretical frame of reference, were obtained on a large scale data processing system (IBM 704). The compupational procedure was as follows: 1) the questions which contributed to a theoretical dimension were selected as described previously; 2) each multiple choice question represented a response range of from 1 to 4 or 1 to 8 with the high end being the saturated position; 3) each pupil receives a mean score for each cluster of items representing a dimension; 4) each class dimension score is derived by summing the pupils' mean scores and dividing by the number of pupils in the classroom (this procedure was carried out for each of the 19 dimension scores); 5) the index score, for every classroom on each of the four positions was arrived at by taking a mean of the classroom dimensions which related to that position.

The pupil score values indicate the degree to which the theoretical concepts are in evidence in a classroom as seen through the eyes of pupils. Table Five presents the means and standard deviations for the four classroom indexes by grade.

TABLE FIVE

PUPIL QUESTIONNAIRE: MEANS AND STANDARD DEVIATIONS OF INDEX SCORES BY GRADES

Grade	Learning		Mental Health		Development		Group Process	
	X	SD	X	SD	X	SD	X	SD
5	5.77	.25	3.56	.61	2.62	.14	2.63	.32
7	5.83	.40	3.60	.36	2.60	.17	2.58	.18
9	5.70	.45	3.35	.49	2.50	.11	2.40	.14
AVERAGE	5.75	.38	3.51	.51	2.57	.16	2.53	.25

The impressive aspect here as in the other normative tables is the stability of the individual indexes across grade levels, where the differences are not significant. The possible range of scores in the Learning Index is from 1 to 8; the actual scores for classes range from 4.91 to 6.48. The Developmental Index range was 1 to 8. Here the actual scores ranged from 2.22 to 4.47. The Mental Health Index possible range was 1 to 4 while the actual low score was 2.28 and the high 2.84. On the Group Index, the possible range was 1 to 4 and the actual was 1.85 to 3.01. While these may not seem to be impressive differences, it must be remembered that they are the compound scores from many pupils answering many items in each instance. As such, they have high stability. If one doubles the scores of the Mental Health and Group Indexes to equalize the range possible, it is clear that the mean for the Developmental Index is much lower than the others. All scores were translated into standard scores for later comparisons.

If one looks back of the indexes to the dimensions which comprise them, several items are worth noting. The ninth graders, on the average, see less intensity of all the dimensions while the fifth and the seventh are very close. Values for pupil motivation, pupil acceptance, teacher acceptance and cohesiveness all decrease. The rate of decrease is faster for boys than girls. The exercise of autonomy as shown in self selection of learning activities goes up with grade level, yet the reverse is true for group discussions which can influence the class. There are so many complex problems here that a special study is being conducted to analyze the nature of response patterns by grade level.

Norm Items. The relationship of self perception vs perception of the group standards is a most interesting one. There are many aspects of this problem which deserve study. Only two will be reported, and then but briefly, at this time.

First, the following table, Table Six, presents self perceptions vs perceptions imputed to classmates regarding the several dimensions where norm data were collected.

If one takes the added self perceptions and compares these with the condition that is inputed as the group normative condition, it will be noted that the individual pupils see themselves in a more favorable condition than they are willing to

TABLE SIX

GROUP NORM DIMENSIONS: SUMMATED SELF REPORT VS INPUTED GROUP CONDITION

GRADE	MOTIVATION[1]				INPUT[1]				FEEDBACK[1]				COOPERATION-ACCEPTANCE[2]			
	Self		Group		Self		Group		Self		Group		Self		Group	
	X	SD	X	SD	X	SD	X	SD	X	SD	X	SD	X	SD	X	SD
V	6.08	.33	5.27	.46	5.62	.26	3.99	.44	6.15	.21	5.21	.32	2.82	.33	2.69	.21
VII	5.91	.49	5.18	.39	5.62	.44	4.04	.38	6.37	.51	5.67	.42	2.70	.33	2.51	.31
IX	5.56	.63	5.07	.41	5.50	.41	4.14	.64	6.38	.53	5.70	.13	2.63	.17	2.64	.27
MEANS	5.85	.48	5.17	.42	5.58	.37	4.05	.49	6.30	.44	5.53	.29	2.71	.28	2.61	.26

1 8 point scales

2 4 point scales

assign to the group at large. This is true in 11 of the 12 comparisons and in all of the total mean comparisons. In many instances the differences are not large but the consistency is impressive.

Regardless of this noted discrepancy, the correlations between a self dimension and its corresponding perceived norm dimension are moderately high and positive. The correlations, in the order listed in Table Six, are +.74 (motivation), +.67 (input), +.50 (feedback) and +.40 (cooperation-acceptance). All are significant at the 5% level of confidence or better. There is the discrepancy between scores on the self and perceived dimension average scores as presented in Table Six. The correlations suggest that the perceptions are consistent, which may be a consequence of pupils projecting their own feelings into the group. Incidentally, in several diagnostic studies of troublesome classrooms, it was found that the discrepancy between pupils' own stated values and that which they perceived to be the group's condition constituted a major rationalization of low self involvement in learning. They would say, "The group is not interested in working, but I am." The implication was, how could they be expected to do any work with such a group situation. Discussing these results with the class paved the way for a more realistic appraisal of the situation.

The Question of Concensus. An important issue that may be raised, concerns the degree of concensus of a classroom group in reporting about classroom events. It is suggested that high or low pupil concensus may indicate differences in the affective climate of classrooms. Concensus might be measured by the size of the variance or standard deviation computed on the distributions of pupil responses to the several dimensions investigated in this study. Specifically, low concensus might reflect a situation which personally is threatening to some pupils.

One classroom may be cited to illustrate this measurement property. This was a 5th grade classroom, in which pupils generally were perceived as unfriendly. While the mean anxiety index did not deviate greatly from the overall 5th grade anxiety index, it was found that some members tended to deny any classroom anxiety. This in turn tended to lower concensus for this class in regard to the anxiety dimension. Some work is underway on the issue of high and low concensus.

Observation Schedule. On the Observation Schedule a score of 5 represents a maximum rating and reflects a high degree of classroom presence of the dimensional quality in question. Those scales which, upon final inspection, showed little variability or were of questionable theoretical appropriateness were eliminated. On this basis all of the Group Process scales (Communication, Group Structure, and Autonomy) were rejected.

Scores were then computed, for those scales that were retained, in the following manner. A mean rating on each scale was obtained by averaging the successive ratings made on that scale. Dimension scores were then obtained by summing the mean ratings on scales subsumed under that dimension. The dimensions of Diversity of Assignments, Self Selectivity, Teacher Affect and Peer-Peer Affect were composed of one scale; all other dimensions were composed of two scales. Consequently the scores for the single scale dimensions were doubled in order that all dimensions scores would all have the same theoretical range of 2 to 10. This was done in order to facilitate the comparison of the scores.

Those dimensions which produced the greater variability and hence were considered of better descriptive quality were: Motivation, Self Selection, Diversity of Materials, Diversity of Assignments and Teacher to Pupil Affect.

Next these dimension scores were converted to index scores by summing those that were subsumed under each different theory. The Learning Index was computed by adding the Motivation, Information Input, Feedback and Activity scores. The Developmental Index was computed by adding the Diversity of Materials, Diversity of

was computed by adding the Diversity of Materials, Diversity of

Assignments and Self Selection scores. The Mental Health Index was computed by adding the Teacher Affect and Peer-Peer Affect scores.[1] No Group Process Index was computed as all of the group scales were rejected. Table Seven presents the observational

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[1] The reader is reminded that the Assignments, Self Selection, Teacher Affect and Peer-Peer Affect dimension scores were obtained by doubling the mean ratings on these scales. This was because they were single-scale dimensions where as the others were double-scale dimensions.

TABLE SEVEN

OBSERVATIONAL SCHEDULE

Means and Standard Deviations of Index Scores,
by Grade

GRADE	LEARNING		DEVELOPMENT		MENTAL HEALTH	
	X	SD	X	SD	X	SD
5	19.6	2.33	13.2	4.12	10.0	2.49
7	19.8	3.21	11.6	3.63	11.0	1.91
9	19.3	3.00	9.8	3.18	10.1	2.41
MEAN	19.6	3.19	11.5	3.82	10.4	2.28

The three indexes had the following potential and actual score ranges: learning, potential 8-40, actual 11-26; development, potential 6-30, actual 6-21; and mental health, potential 4-20, actual 6-14. Z scores were compiled for a distribution based on the total number of classes since the variation between grades was, with the exception of developmental, negligible. The grade level differences were not significant. The possible range was considerably magnified and hence these standard deviations while larger than those previously reported did not necessarily indicate more dispersion. The decrease with grade level, of the Developmental Index scores was anticipated.

INDEX INTERRELATIONSHIPS

In this section we move to the heart of the original matter under study. Do the different sources provide compatible information on the various indexes? Finally, are the classrooms high in one area also high in others? Is a high saturation on one particular position usually followed by a stable pattern of relationship with the other positions or do the patterns vary? Again, it should be remembered that although the sample size was only 30, the scores resulted from a farily large number of responses and as such are highly stable. The correlation value needed for a .05 level of significance is .36; for .01 level is .46, based on 29 degrees of freedom.

How related will evidence on the presence of various classroom conditions be if we look at them one by one? Do teachers take the same stance philosophically and operationally? Do pupils produce a classroom assessment which correlates with the teacher's view? Will the observer view conditions in a similar fashion to either the pupil or observer? One practical consideration is to find the least complex process of assessment; if one can obtain by brief observation what one finds from extensive questionnaire study, why use the more complex procedure? If the teacher sees what the pupil sees, the time and expense for data collection and analysis can be greatly reduced.

The compatibility of information from various data sources: Intercorrelations of Indexes from different data sources. The following tables summarize the relatedness of each of the four theoretical positions for the 30 classes when assessed by various means: the teacher's overall philosophy on the card sort *Teacher Opinionnaire*; the teacher's general practice on *The Reality of Classroom Practice*; the teacher's view of this particular class from the *Teacher Questionnaire*; the pupil's view of the conditions in this class in the *Pupil Questionnaire*; and an observer's ratings of this class on the *Observation Schedule*. Only the last three focus on the same target, a given classroom. The correlations between the various instruments for the four indexes are presented in Tables Eight through Eleven.

In considering the different assessments of the developmental position in the classroom, the teacher's philosophy and his general practice have no significant relationship, but there is a significant relationship between the condition he believes important and the condition of the particular classroom under examination. Also, the pupil and the observer are in alignment with the teacher's view of the classroom in this index.

In the Learning Index, the pupil and observer are significantly related but neither is related to the teacher perception. When it comes to the Mental Health Index, there are no

TABLE EIGHT

INTERCORRELATIONS OF DEVELOPMENTAL INDEXES DERIVED FROM DIFFERENT DATA SOURCES

	Teacher Reality Practice	Teacher Classroom Questionnaire	Pupil Classroom Questionnaire	Observer
Teacher Philosophy	.12	.38*	.12	.22
Teacher Reality Practice		.16	-.02	.05
Teacher Classroom Questionnaire			.47**	.60**
Pupil Questionnaire				.28

5% level of significance *

1% level of significance **

TABLE NINE

INTERCORRELATIONS OF LEARNING INDEXES DERIVED FROM DIFFERENT DATA SOURCES

	Teacher Reality Practice	Teacher Classroom Questionnaire	Pupil Classroom Questionnaire	Observer
Teacher Philosophy	.24	.10	-.06	.00
Teacher Reality Practice		-.09	- 01	.06
Teacher Classroom Questionnaire			.09	.08
Pupil Questionnaire				.30

TABLE TEN

INTERCORRELATIONS OF MENTAL HEALTH INDEXES DERIVED FROM DIFFERENT DATA SOURCES

	Teacher Reality Practice	Teacher Classroom Questionnaire	Pupil Classroom Questionnaire	Observer
Teacher Philosophy	12	-43*	-05	-.06
Teacher Reality Practice		-.05	23	-23
Teacher Classroom Questionnaire			-13	-27
Pupil Questionnaire				28

5% level of significance *

TABLE ELEVEN

INTERCORRELATIONS OF GROUP INDEXES DERIVED FROM DIFFERENT DATA SOURCES

	Teacher Reality Practice	Teacher Classroom Questionnaire	Pupil Classroom Questionnaire
Teacher Philosophy	06	-13	.06
Teacher Reality Practice		-27	11
Teacher Classroom Questionnaire			42*

5% level of significance *

significant relationships between data sources. In addition, it appears that a teacher who puts high value on this factor is likely to see it least in the actual classroom and vice versa. In group process, the only significant relationship is the teacher and pupil when directed to the particular classroom.

In general, there is little of a systematic nature in the results. Of 36 correlations, 3 are significant at the 5% level (one of them being negative) and 2 at the 1% level. We can conclude that a teacher's expressed philosophy, at least as assessed by the card sort, does not give an indication of general practice or classroom condition as seen by the teachers. All of the significant relationships involve the teacher's perception of the classroom as one variable, but there is no consistency in the other variable: it may be teacher philosophy (positively or negatively); it may be the pupil or it may be the observer. Pupil and observer never agree better than chance. The developmental position, surprisingly, shows the greatest consistency, if indeed anything in this unimpressive array of relationships can be said to have consistency. It can only be said that there are no significant reversals of perception in these scores which focus on the life space of the classrooms. If one were to break down the global indexes and examine the sub measures, it might be possible to locate the specific elements of similarity.

What can we conclude in summary? First, there is no possibility of substituting observer, teacher or pupil assessment one for the other if one is to study a classroom. This does not suggest that one data source is better than another, though one may be more suited to a particular study goals than another. It is also clear that general teacher ideology will not predict general teacher practices or the nature of the given class now being taught. Perhaps the conditions are not easily visible and all values obtained are open to question. The opposite contention would be that each set of scores represents a different slice of what goes on in the classroom and agreement can be expected to be negligible. Each rater sees a different facet of the classroom and has a unique vantage point.

We can see here one of the problems in rating performance of teachers which is so often evident in the literature. Characteristically, ratings are made on the basis of "good" or "poor" teaching. One might expect this to differ with different raters' points of view. However, in the present study we established criteria and looked for the presence or absence of a series of specifics. And yet the lack of agreement maintains. What the teacher sees is not the same as what the observer sees.

It suggests too that research done on classroom conditions can ill afford to imply a state of affairs generalized from one data source to another. It raises some serious questions when one describes some aspect of a class, the learning climate for example. It is one thing seen by pupils, another by teachers and another by a trained observer. The conditions which make for high agreement and high disagreement deserve attention for it is evident that in certain instances there is coherence while in others there is divergence.

Are Classrooms mutually saturated with various attributes? Intercorrelations of indexes from the same data source.

Thus far we have found that the various viewers do not not see a similar pattern of constituents in the classrooms under study. We turn next to the comparison of the condition in the classes from the five separate questionnaires as sources of data.

To what extent and in what manner are the various theoretical positions related in classrooms? Since the data sources are not compatible, it is necessary to look at this problem separately from each data source. This is the problem to which we initially addressed ourselves. Will the class high in learning factors also be high in mental health factors? Are the four positions related in any manner, or are they in opposition to each other? We will first examine the spectrum as seen from each individual data source.

Intercorrelations of the Teacher Opinionnaire Index Scores. It is virtually impossible to study the problem of interrelationships from the ideological point of view because of the nature of the test device. It is again pointed out that the scores on this instrument are not independent. A 100 point total was possible as a scoring basis for the four indexes. Thus a high score in one area necessitated diminished scores somewhere else, but how the remaining scores were distributed among the remaining

TABLE TWELVE

TEACHER OPINIONNAIRE INDEX INTERCORRELATIONS

	Development	Mental Health	Group Process
Learning	-.44*	-.01	-.56**
Development		-.39*	-.10
Mental Health			-.43*

5% level of significance *

1% level of significance **

three indexes could vary greatly. Thus the matrix in Table Twelve can only be interpreted at its extremes.

The fact that this is the only instrument where a high score in one area prohibits a high score in the other areas, accounts for the negative correlations throughout. There is no cue as to significance of any of these correlations. Although the scores are not independent, they are not necessarily orderly in their relationship to one another. For example, the correlations between these scores range from -.01 to -.56 which might mean that a number of combinations or profiles can be obtained such as one high score, two moderate scores and one low score; or two high scores and two low scores; or one high score and three low scores and so on. When the individual teacher T scores are plotted graphically gross variability in profile is evident. As would be expected partial correlations only elevate the coefficients of correlation to a range of -.93 to -.98. A suggestion for an alternative technique for scoring this scale will be presented in the final summary.

Intercorrelations of Teacher Reality of Practice Index Scores. Unlike the previous indexes, these scores are independent of each other. Most noticeable is the relatively high incidence of significant negative correlations. The results are shown in Table Thirteen.

TABLE THIRTEEN

TEACHER REALITY OF CLASSROOM PRACTICE INDEX SCORE INTERCORRELATIONS

	Development	Mental Health	Group Process
Learning	-29	-55**	-16
Development		-07	20
Mental Health			-55**

1% level of significance **

When it comes to general practice teachers do not see various theoretical positions as evenly balanced, nor do they see them all high. Between solutions reflecting group emphasis and learning emphasis, group and developmental or developmental and mental health, there are no significant relationships. However, the emphasis on mental health practice is seen as significantly related to an absence of group or learning practices in solving problem situations. It will be remembered that the teachers as a total group did not use the four theoretical positions equally, learning receiving the highest and developmental and lowest total response. With standard scores for each index, this variation disappears in Table Thirteen. The generalization from this table is that a teacher who stresses mental health practice would not stress learning or group practice. Since both this scale and the previous idiological one were not designed to fixate on specific classes we turn next to the teacher responses which were directed to the classes under scrutiny, the same 30 classes producing the pupil responses and observer ratings.

Intercorrelations of Teacher Questionnaire Index Scores. It is to be noted that certain inverse relationships emerge in Table Fourteen. When teachers describe their perception of the classrooms they now teach, as one position becomes highly stressed the others are less stressed.

TABLE FOURTEEN

TEACHER QUESTIONNAIRE INDEX SCORE INTERCORRELATIONS

	Development	Mental Health	Group Process
Learning	-35	-42*	19
Development		03	22
Mental Health			-70**

5% level of significance *
1% level of significance **

The mental health index is again inversely related to group and learning. There is also a near significant negative relationship between learning and developmental. The similarity between

Table Thirteen and Table Fourteen is striking. While the size of the two sets of correlations for the two separate instruments differ, there relative pattern is almost identical. Since the Teacher Questionnaire and the Teacher Reality of Classroom Practice scales were given several days apart, the same style of discrimination gives a feeling of confidence about their response patterns. This may not be surprising as both are from the same data source, but it will be remembered that none of the cells in Table Thirteen correlate significantly with their companion cells in Table Fourteen. That is, while teachers' perceptions of their classes produce a highly significant negative correlation between mental health and group saturation (-.70), the relationship between mental health when teachers describe their general practice and the condition in specific classes was -.05. The parallel condition for the two group indexes was -.27.

We can conclude that, when teachers focus on their present classrooms, they do discriminate between the presence of the various conditions. As they respond, a class high on one index will not also be high on another. Actually the reverse tends to be true, high on one index tends to be related to low conditions on other indexes more often than not.

The question of why the positions tend to cluster inversely is open to speculation. For one thing, teachers may compensate for what they believe to be the absence of one condition by stressing the others. Or perhaps the teachers are defensive in responding and do not wish to 'spread their efforts too thin.' The correlation of -.70 between mental health and group might reflect recognition of problem areas within the classroom, some of which are more defense provoking than others. The teacher might be willing to indicate group malfunction but not willing to indicate its related mental health manifestation. On the other hand the negative relationships may reflect an "either-or" attitude where teachers are prone to categorize classes on the basis of stereotypes as 'either this type or that.' The second highest negative relationship is between learning and mental health. Perhaps these two inverse relationships reflect the cultural stereotypes of 'you are not in school to have a good time but to learn something' and 'you cannot learn anything if you are talking to your friends all the time.' This fits the cultural attitude, reflecting the criticisms we so often hear and which cause concern to this research committee.

Intercorrelations of Pupil Index Scores. Unlike the teacher data, the pupil data presented in Table Fifteen show moderately high associations between the index scores of three of the four frames of reference. The one exception is the developmental position, which is relatively independent of the learning and mental health positions yet highly related to the group processes position.

This association between positions continues to be apparent if one goes back to the relationships between the various dimension scores:[1] overall, a large number of the inter dimensional correlations are significantly positive.

TABLE FIFTEEN

PUPIL QUESTIONNAIRE INDEX SCORE INTERCORRELATIONS

	Development	Mental Health	Group Process
Learning	18	66**	42*
Development		16	52**
Mental Health			57**

5% level of significance *
1% level of significance **

Several aspects are to be noted here. First, all relationships are in the positive direction though two are not significant. Incidentally, the grade level material suggests that there is increasing discrimination and variability with the older pupils. However, the tendency is for the pupils to respond to the classrooms in a global fashion, with much of some general 'G' factor operating. Whatever makes the classroom an intense place in the positive sense colors all other aspects of the classroom scene. For the pupil, if there is a high saturation of the mental hygiene condition, there will also be high saturation of group process and learning involvement. Except for development which, with one exception, stands by itself the other three indexes co-exist in intensity to a high degree. Note that two of the largest positive correlations (group-mental health and learning-mental health) are in reverse of similar correlations for the teachers where these correlations are also significant but negative.

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[1] While it is too involved to present all of the item intercorrelations for a dimension, the significant dimension intercorrelations can be studied in the table in the appendix.

Development tends to be aside but it will be remembered that the various sources perceived this with the highest agreement of any index. The point here is, its presence or absence is not bound by the presence or absence of any other index.

These data indicate that the theoretical positions are not independent, at least as far as the pupil's perception of the class is concerned. Possibly pupils perceive the classroom with less discrimination than the teachers. Or it may be that some other overall condition, say motivation, dominates perception of the classroom. Factor analysis of the response systems now under way should provide some insight here.

Intercorrelations of Observer Index Scores. Relationships similar to, though not as pronounced as those found in the pupil data are also found in the observer data in Table Sixteen. But in contrast to the pupil data the developmental position shows a definite relationship with the learning and mental health positions. It should be noted, however, that only three index scores were derived from observational data and that all three of these scores are highly interrelated.

TABLE SIXTEEN

OBSERVER INDEX SCORE INTERCORRELATIONS

	Development	Mental Health
Learning	47**	57**
Development		35

1% level of significance **

From the point of view of the trained observer, the classrooms high in intensity of one of the three factors would also be high in the others.

What can we conclude? The original question of this research was whether or not a classroom with high learning intensity would also have high recognition of developmental needs, broad group relationships and high mental health. Are the advocates right in saying one class has positive interpersonal relationships only at the expense of favorable substantive learning climate? Two sources suggest that the several conditions have compatible co-existence. The teacher, designer of the classroom experience does not respond this way. To him, it tends to be "either-or" rather than "one and the other." The teachers see the classroom as emphasizing either one or another aspect. The producer of classroom operation differs from the consumer and the trained observer in this respect. Whatever area the teacher concentrates on, one should not forget that to the pupils the various emphases will be intermingled. The total impact is what counts. Of course this does not answer the vexing question. Are there many roads to classroom success or just one for the teacher as far as the pupil is concerned? That is, is learning the key to a general favorable perception by the consumer, or is it through the mental health route, through attention to developmental needs or group processes? Perhaps any one high will carry with it the others, or any one very low will reduce the others. If the observer is objective, the conditions co-exist in reality and are not mere pupil illusions. McKeachie's[1] material on different need structures of pupils suggests another alternate. If there is a reasonable degree of a given condition, the pupil responds to the one he most needs--relationship, accomplishment, security or having a chance to work at his given leve. This in turn would color his response to the other indexes, so that high or low on his critical index would carry others with it.

The relationship of master classroom indexes utilizing all three data sources. There remains yet one final summation of response for the thirty classrooms. This research is concerned with the overall nature of classrooms, and we have three sources of information, but there are arguments pro and con regarding the combination of such diversities as psychologists observations, pupil perceptions and teacher reports. It can be argued that they are different in kind. On the other hand, just as we had many items, not always highly correlated, to build a dimension and an index, we have three sources of data concerning each classroom, and these sources can be presumed to contribute something to the total assessment. It will be remembered that there was little concensus between teacher, observer and pupil for any of the indexes in Table Eight through Table Eleven.[1] Two of the three significant and positive correlations were developmental, the other one group process. Of the others, five were positive and three negative though none of these were significant. Thus, in using the material from the three sources, no oppositional elements were combined. If we presume all perceptions contribute something to the actual assessment of the classroom, what would result if grand indexes were compiled from these variant, presumably independent sources? Would this even out idiosyncracies and give a more stable set of index values for comparison of classes? Would the conditions still be coexistent? This, in effect, is to combine various views on the same target, the classroom. Each of the three sources will be given equal power through using averages of the standardized index scores. Except for the Group Index, where no observer score is available, each "Master Index" will be composed of the three sources. The range of the summated standard scores for the indexes were as follows: Master Learning Index, 38-64; Master Developmental Index, 33-60; Master Mental Health Index, 35-63; and Master Group Index, 25-69.

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[1] McKeachie, W.J. "Students, Groups and Teaching Methods" American Psychologist Vol. 13 No. 10 (October 1958) 580-584.

The correlations between these indexes are presented in Table Seventeen.

According to Table Seventeen, in a most general way we can say that a classroom will not be found to emphasize one aspect at the expense of another. Three of the correlations are significant, two at the 1% level. There are no significant negative correlations even though the teacher material contained three negative correlations. It is not unexpected to find group and developmental positions correlated as self selection of experience and freedom in the group area are compatible. It

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[1] We are speaking here only of the Teacher Questionnaire and not the Teacher Opinionnaire (philosophy) or the Teacher Reality of Classroom Practice, since these two do not focus on the particular classrooms.

TABLE SEVENTEEN

MASTER INDEX SCORE INTERCORRELATIONS

	Master Development	Master Mental Health	Master Group Process
Master Learning	.21	.32	.49**
Master Development		.40*	.66**
Master Mental Health			.35

5% level of significance *

1% level of significance **

will be remembered that pupils saw the factors of a classroom as mutually appearing, four of the six correlations being significant. The observer also saw conditions as co-existing, two of the three being significant. We see from the overall Master Index comparisons, there are no negative relationships between the presence of factors in classrooms. Good mental health does not predict low learning. In fact, in no instance does the presence of one position counter-indicate the presence of another. On the other hand, half of the time the presence of one is a positive indication of the presence of others. If we accept this as a total judgment we have no evidence to support the critics who hold that a classroom cannot provide for more than one set of needs at the same time.

IV CLINICAL EXAMINATION

One use of data collected in this study is in the clinical analysis of given classrooms. It would seem most important for a teacher to examine the various indexes to see what the particular nature of the class profile might be. To illustrate this, we have selected eight classrooms. There are of course many, many criteria for selecting examples. One could take the ones with the highest or lowest Grand Index, the ones with greatest and least pupil-teacher agreement; or those where scores were highest on one or another index. We have selected a few examples to illustrate the general results and the type of a report made available to each teacher.

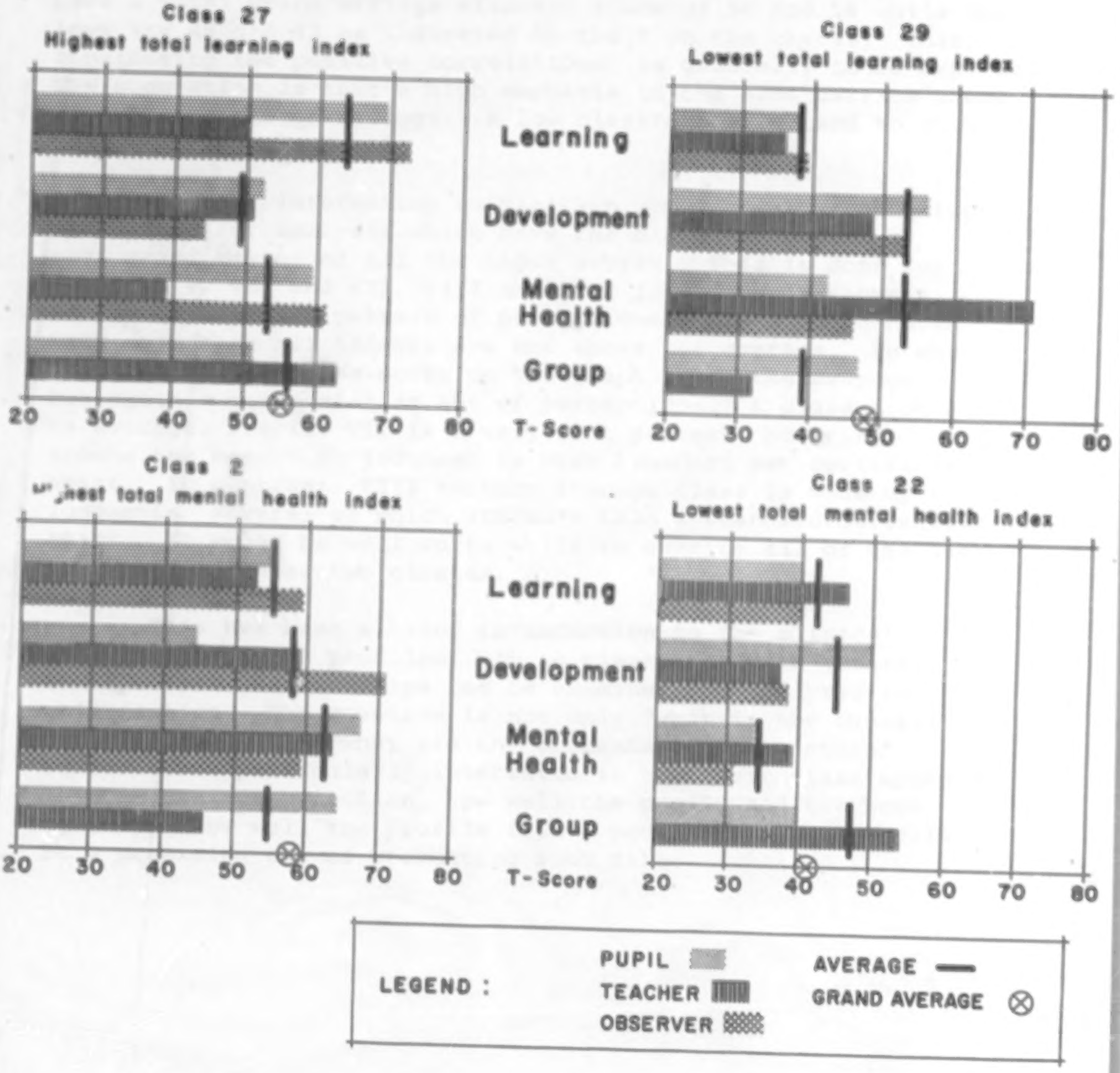
The illustrations are as follows: Profile I, highest Master Learning Index class; Profile II, the lowest total Master Learning Index class; Profile III, the highest Mental Health Index class; and Profile IV, the lowest Master Mental Health Index class. They are presented in Chart I.

In the first profile, the teacher tends to be conservative compared to the others with regard to his judgment of the learning conditions in the class. The provision for developmental needs is average, and the mental health rated high by the pupils and observer, but low by the teacher. The teacher rates the mental health of the class low. Group process is not too divergent. Overall, the teacher ratings are conservative.

In the low learning Profile II, there is concensus on the part of all three viewers regarding the learning and development and divergency regarding group and especially mental health. It would appear that this teacher perceives a mental health condition which is not seen with the same intensity by observer or pupils. The teacher in Profile I does not rate the class high in learning and sees group process high and then mental health low. The others see high learning, and mental health but not higher group process.

Let us examine those with pronounced deviation scores in mental health. Conditions which promote mental health are often thought of as in opposition to optimum learning conditions. Profile III shows generally elevated scores, but,

PROFILES OF T-SCORES FOR INDIVIDUAL CLASSES



Class 27
Highest total learning index

Class 29
Lowest total learning index

Class 2
Highest total mental health index

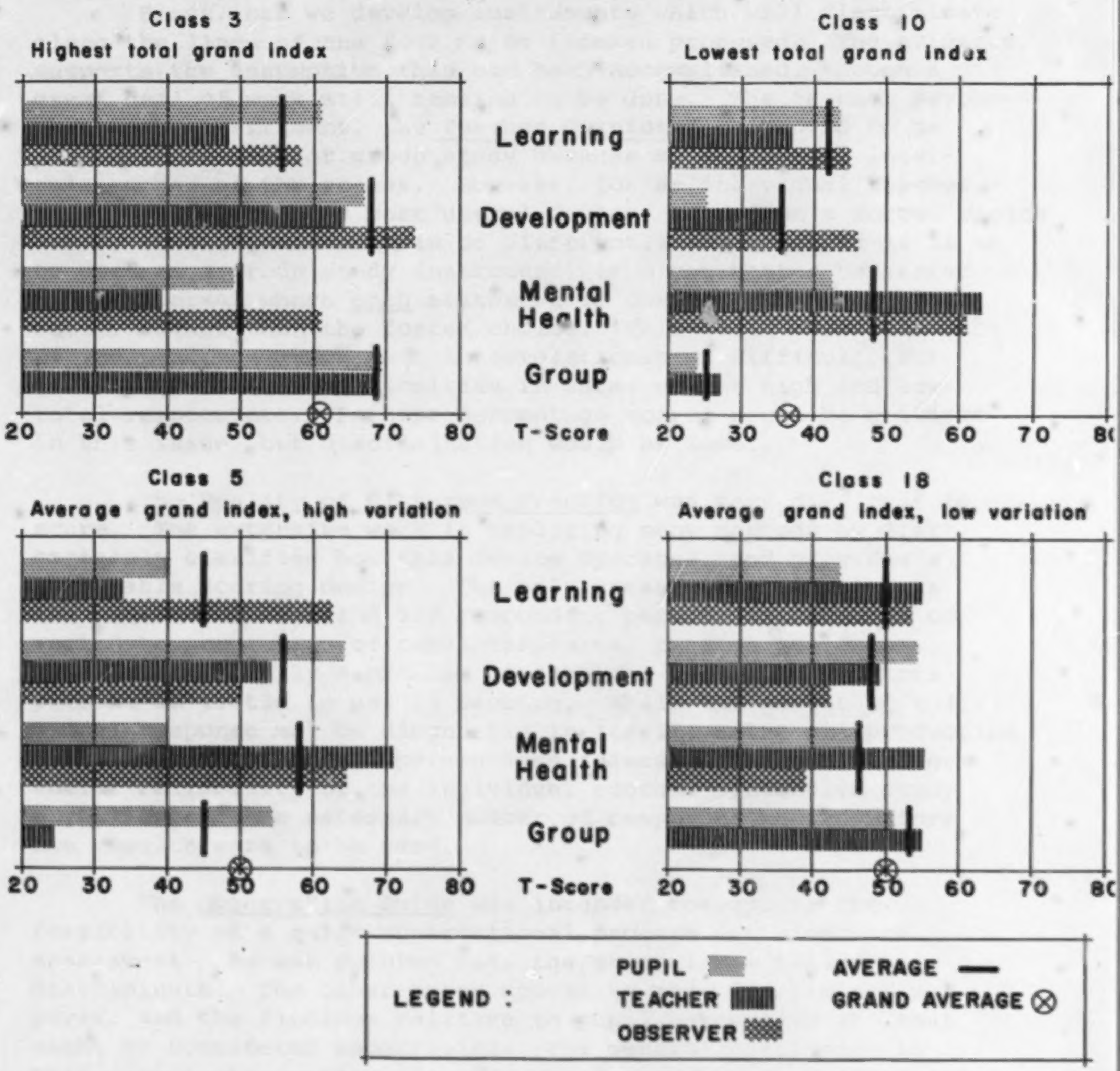
Class 22
Lowest total mental health index

except for the observer's high developmental score, not extreme. The reverse tends to be true of the low mental health Profile IV. Overall this tends to be a depressed classroom in the several measures. It is interesting that the two high profiles have a total grand average standard score of 58 and 56 while the lows are 48 and 42 as indicated by the * on the charts. This, considering the positive correlations, is generally to be expected. The suggestion is that a high emphasis in one area carries along with it other high ratings. A low classroom will tend to show up low across the board.

Another interesting examination comes from the selection of classes for analysis which have the highest, lowest, or mean grand Master of all the index scores. This is done for Profiles V, VI, and VII, VIII on Chart II. Class V shows a remarkably similar pattern of perceptions. It is to be noted that even here all indexes are not above the average. In contrast VI has only one score on the graph above the average, but again a quite similar set of perceptions. A class picked as average, Profile VII is a very flat pattern, hovering around the mean. No judgment is over 2 standard deviations apart. In contrast, VIII, another average class is made up of judgments, several of which are more than 2 standard deviations apart. It would be well worth while to examine all of the data in detail in these two classes.

This has been a brief introduction to the clinical examination of the profiles. It is clear that both general and specific relationships can be examined and analyzed in this fashion. The question is not only "what is the overall picture", but also "what are the elements of the picture." Teachers are particularly interested in how their class appears in a general distribution, how well the pupils and teachers agree and how well the profile fits expectation. This should be a promising way of presenting such data.

PROFILES OF T-SCORES FOR INDIVIDUAL CLASSES



V CONCLUSIONS

THE INSTRUMENTS

First, can we develop instruments which will discriminate along the lines of the four major indexes proposed? The evidence supports the assumption this has been accomplished, though a great deal of work still remains to be done. The teacher psychophilosophy instrument, the Teacher Opinionnaire proved to be difficult to use for group study because of the forced interrelatedness of the scales. However, for an individual teacher, this would still be a most useful device, scored on a forced choice basis, enabling an analysis of differential values. If it is to be used as a group study instrument, it might better be scored using a format where each statement is checked on a four point scale, rather than the forced choice. This would avoid the lack of independence which made interrelationships difficult, but would produce some difficulties in terms of the high and low total respondants. Perhaps percentage scores could be utilized in this issue, but discrimination would be lower.

The Reality of Classroom Practice was very difficult to score. The extensive work in exploring many methods by Gier certainly clarified how this device operates, and provides a reasonable scoring design. The only uneasiness remaining is the problem of high and low responding persons which, when converted to percentage of total responses, creates uneveness. This is essentially a problem of sampling when some teachers' present so little to use in scoring. While the amount of individual response may be diagnostic in itself, using all production levels as equal through percentages raises question of differential reliability of the individual scores. Intensive study might suggest the necessary number of responses needed before the results were to be used.

The Observation Guide was intended to explore the feasibility of a quick observational process for classroom assessment. As was pointed out, the group index failed to discriminate. The other three appear to have discriminating power, and the findings relative to pupil perception at least might be considered encouraging. The general conclusion is that direct observation, for the valid assessment of dimensions under examination in this study, would demand much more time and become a very involved procedure. The next direction here appears to be a clinical examination of classroom situations, direct observations coupled with intensive interviews of the teacher and some pupils along with a study of how materials are actually used in the classroom setting. At any rate, brief time sampling does not appear to be the direction to go in for collecting these data. The next step here would be to compare the results from a highly complex, OSCAR type of observation with the same dimensions done in the style we used. It is just possible that observations of the summated type presented here will be as useful as detailed accumulations for the purpose at hand.

The Pupil Questionnaires were encouraging in many ways. It was of some surprise that indexes could span the grade levels attempted in this study as well as they appear to have done. The detailed statistical analysis of the pupil responses is such an extensive matter that it will be referred to as an area under independent study. Overall, with the exception of the developmental stance which was more difficult to instrument, it appears that these conditions are important ones and ones on which useful pupil data can be obtained. Pupils can respond to the items, and they do differentiate. What needs to be done is a drastic reduction in items so that the same material can be collected in half the time, a process now underway. At any rate, knowing the pupil's reactions to these conditions presents a information around usable and important conditions.

AN EXAMINATION OF THE ORIGINAL PROPOSITIONS IN TERMS OF THE FINDINGS

This research began with two major questions. First, will various perceivers of the classroom assess it in the same way if they are asked to appraise its nature on explicitly similar given dimensions. In general, the answer is no, at least as far as our instruments are concerned. (1) The teacher's philosophy and the teacher's general practice (what he thinks he generally does) bear no significant relationship. This may be a consequence of reality pressures, or it may be that philosophical position is not thought of as an action determiner. This was somewhat of a surprise to us and constitutes an area we are planning to study in detail. There may be a cultural stereotype which sets "theory" against "practice" and holds them incompatible. (2) There is a perplexing relationship between teacher philosophy and the conditions imputed to be present in the particular classroom. Those who value the development position believe it present in the classes they teach. On the other hand those who put a premium on mental health do not see this condition in their classes. In this case philosophy and classroom conditions oppose each other. This would seem to indicate a conflict situation and may reflect high expectations with a tendency to discount the classroom mental health situation as it really is. (3) If one wishes to evaluate the learning or mental health status of a classroom, one cannot depend upon the observer, teacher or pupil to give indications of the condition as it will be perceived by the others. This raises the logical question: which is the correct one or are they all correct to a degree? Certainly what the pupil perceives is a critical issue in classroom assessment, but we would loath to exclude the importance of other perceptions.[1] For instance, the judgment of retention of a teacher is usually based upon a raters perceptions, in this case the administrators, so observer's perceptions are important too. Also, the teacher's satisfaction with his role enactment may be a matter of how he sees what transpires, so that has its place as well. (4) Pupils and teachers do tend to see eye to eye on the group condition and on the allowance for developmental needs in the classroom. On the latter, the observer concurs. (5) All in all, the appraisers cannot be substituted one for another. Each observer, teacher, pupil, outsider--sees different aspects of the classroom. Classroom research should take this fact into consideration.

The second and major question of this research was, can we find, mutually present, the various conditions which are thought to be important in a classroom? If there is high mental health, will there be high learning and so on. Or is one condition present at the expense of another?

(1) To the teacher, one classroom stance counter indicates another emphasis. Teachers, either by training or inclination, see the classroom as being of one given nature or another.

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[1] Cogan, M.L. "The Behavior of Teacher and the Productive Behavior of Their Pupils: I. Perception Analysis." Jo. Experimental Education Vol. 27, (Dec. 1958) 89-105.

Particularly if there is an emphasis on mental health, there will not be an emphasis on group process or learning. If teachers are right in this assumption, the critics who maintain we must push substantive learning at the expense of other conditions are right too. But, are the conditions the teachers think they are maintaining actually there?

(2) To the pupils one positive factor accompanies another. If there is high learning intensity, the mental health is also high, and there will be emphasis on group process. To a lesser degree, there will also be provision for the developmental needs. Since we know that, for individual classes this does not operate as a halo, it probably reflects some general positive appraisal of the total classroom situation, but not simply a general factor. Probably when a pupil finds his basic need satisfied he also sees other conditions as favorable. If we took the pupil indexes to represent high affiliation need, power need and achievement need, it would be possible to select high and low sub groups on each and study this pattern.

Since observers also see a picture similar to that of the pupils, it may be that these represent a reality factor which the teacher should examine. At any rate, outside of the teacher, we have found confirmation for the mutual appearance of factors in the classroom. The critics who contend otherwise are either speaking of extremes or they are in error. The effective teacher, regardless of self expectation, works all areas together, or they use one avenue to create, in pupils and observers, a feeling of all areas working more or less in unison.[1] Using these scales, statements about classroom educational activities can be based on something more than superficial opinion. (3) The examination of the specific classrooms reveals much of an idiosyncratic nature. Classes do differ not only in the intensities of the factors but in the inter-relatedness of the factors. Thus a clinical approach to the study of classrooms should be a most useful tool in working with both teachers and pupils. It could be used in pre and in-service teacher education.

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[1] However, the research of Medley, D.M. and Mitzel, H.E. "Some Behavioral Correlates of Teacher Effectiveness" *Jo. Educational Psychology*. Vol. 50 No. 6 (Dec. 1959) 239-246, suggests that teachers may be better judges than we often credit. Incidentally, they report those teachers most effective in teaching fundamental skills allow less group and autonomous work.

UTILIZATION AND FURTHER RESEARCH

The research developed and reported here has been integrated with other projects and comprises one of a series of related efforts. We conclude with a brief statement of further developments possible and underway.

(1) There is a bank of data now available for many future studies. The teachers have shown high involvement in this type of material for their own use as well as further research on their part. Individual staff members anticipate working through some of the specific issues. A graduate seminar is proposed to work out pilot studies on such items as the pattern of other responses made by achievement satisfied pupils vs affiliation satisfied pupils and the like.

There are many additional types of analysis which can be made. For example, it is possible that, at least in some areas, a most important measure would be consensus. What would the relationships look like if they were studied from the viewpoint of range of variation? A particularly fascinating problem here is the contrast of classrooms with high self-norm agreement as over against those with wide divergency. It would also be worth while to concentrate on particular groups of pupils, those with high vs those with low acceptance for example, and study the relationships of these conditions to other factors. Would they show differential responses in all other areas of the classroom assessment?

Another example of specialized use of the data is found in a thesis by Jadwin.[1] He found that the pupils who perceive themselves having acceptance from others (whether or not it was accurate) tend to see the teacher as positive and classroom as supportive. They give more acceptance to their classmates. There is little evidence to suggest that pupils actually receiving acceptance necessarily give it in return.

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[1] Jadwin, John An Exploratory of the Relationship Between Children's Interpersonal Acceptance and Their Perceptions of Classmates, Teacher, and Classroom Situations. Specialist in Education Thesis, 1961. University of Michigan.

(2) Two further major studies are now in progress using these data. One is an investigation of the degree to which the Pupil Questionnaires can be utilized across widely divergent populations. Do differing age and social class groups respond to the instrument in the same fashion? This will make use of the three grade level, dual socio-economic, nature of the sample as described earlier. If different groups of pupils organize their perceptions of classroom behaviors around different constructs, then indiscriminate pooling of data or differential analysis of response differences would not be warranted. A replicated factor analysis will be made to ascertain the nature and similarity or dissimilarity of the constructs used by groups of pupils. Such a study will allow the examination of age and social class differences in response patterns, will ascertain the basic conceptual dimensions along which pupils organize their perceptions of classroom behavior and will form the empirical basis for instrument revision and refinement. The scoring procedures can then be reduced to fewer, but statistically discrete, categories. This, then, will facilitate the study of the functional relationships between the various theories and will permit an extensive reduction in the length of the questionnaire without great sacrifice in construct validity.

A second major study now underway will evaluate certain hypotheses dealing with the variable of test anxiety. Based upon a theory dealing with the etiology and effects of test anxiety, it is predicted that: (A) high anxious pupils will show more dependency behavior in the classroom than low anxious pupils; (B) they will have poorer school achievement outcomes; and (C) they will tend to have lower sociometric status in the classroom.

The dependency concept utilized in this study is the willingness to show affiliative tendencies in terms of the patterning of sociometric responses made by the pupil toward his classmates, and by a willingness to express liking for the teacher. School achievement is measured by both school grades earned within the past year and by current scores on standardized achievement tests. Sociometric status and test anxiety were measured respectively by a near-sociometric rating form and a modified version of the Sarason Anxiety Scale incorporated in the Pupil Questionnaire. A broad age-grade sample will be used as a means of investigating possible developmental trends in the above relationships.

(3) As mentioned the material developed in this project has found ready use in several research projects. In a mental health research evaluation program to assess the impact of a mental health program in education, these forms have been used for the study of teacher reactions and are the major instrument for an analysis of pupil change.[1]

Also, a longitudinal study is underway which will employ a reduced and reorganized pupil response blank for classroom analysis. It is the particular concern of this part of the total University School Research[2] to follow the same classrooms over a period of years, in order to see what stability and mutability expectations one might anticipate. It is also the intent to relate individual self concept material to classroom phenomena.

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1. Michigan Society for Mental Health research program, School Mental Health Project, USPH grant.

2. University School, University of Michigan. "Dimensions of Children's Social and Psychological Development Related to School Achievement". U.S. Office of Education. No. 1286.

APPENDIX

Variables

1. Motivation
2. Content Input
3. Pupil Activity
4. Feedback
5. Individual Differences
6. Self Selection
7. Perceived Content Input
8. Perceived Class Motivation
9. Perceived Feedback to Class
10. Perceived Acceptance--Cooperation
11. Aggression
12. Cooperation
13. Pupil Acceptance--Rejection
14. Cohesiveness
15. Sociometric Acceptance--Rejection
16. Decision-making
17. General Classroom Anxiety
18. Test Anxiety
19. Acceptance--Rejection By Teacher

Variables 1-4 were used in the Learning Index. Variables 5-6 were used in the Developmental Index; Variables 10,12, 14, and 16 were used in the Group Process Index; Variables 11,13,15,17,18 and 19 were used in the Mental Health Index.

INTERCORRELATIONS BETWEEN CLASSROOM DIMENSIONS - PUPIL DATA

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1	-	57	52	20	15	61	26	74	02	15	07	49	39	50	51	54	11	08	65
2		-	78	60	-49	[illegible]	67	69	47	12	-34	44	27	21	16	59	-30	-04	57
3			-	56	-30	53	70	71	21	19	-43	60	58	54	33	47	-20	13	55
4				-	-60	42	58	50	50	-15	-43	20	17	08	22	40	-09	10	46
5					-	06	-45	-16	-54	06	66	03	08	35	01	-11	26	09	-24
6						-	33	75	34	10	-28	37	48	37	55	64	-05	07	32
7							-	49	27	-03	-35	52	40	30	37	47	-31	-03	27
8								-	22	07	-30	59	52	49	55	57	06	05	59
9									-	01	-35	-20	-13	-17	04	22	25	-05	-07
10										-	-21	40	46	18	03	06	-07	-01	06
11											-	-23	-36	11	-17	-07	22	-02	-13
12												-	54	74	54	43	45	-04	10
13													-	67	45	37	-07	13	26
14														-	36	42	22	34	37
15															-	21	28	18	33
16																-	-04	05	37
17																	-	72	21
18																		-	14
19																			-

Any correlation .36 is significant at 05 level for 29 DF

Any Correlation .46 is significant at .01 level for 29 DF

(See Key, page 58 .)

Instruments

This appendix contains the complete battery of instruments used in this research. With the exception of the anxiety instrument, permission is hereby granted for the use of any of these instruments for valid research purposes. The reader is again reminded that the anxiety instrument was a modification of a device developed by Dr. Sarason and the right to grant permission to use that instrument resides solely with him.

Marginal notation is provided on each of the instruments to indicate the items finally selected to assess the various theoretical positions and dimensions. The key is as follows:

D	DEVELOPMENTAL INDEX
ID	Individual Differences
SS	Self Selection
L	LEARNING INDEX
M	Motivation
I	Content Input
A	Activity
Dis	Distractions from Task
F	Feedback
MH	MENTAL HEALTH INDEX
TA	Teacher Acceptance
PA	Pupil Acceptance (Sociometric score)
Ag	Agression
SAn	School Anxiety
TAn	Test Anxiety
G	GROUP PROCESS INDEX
C	Cohesiveness
Co	Cooperation
DM	Decision Making
Com	Communication
N	Group Norms
O	Omitted item, but used in scoring

Code________________
Date________________

TEACHER OPINIONNAIRE

University of Michigan
CLASSROOM RESEARCH PROJECT

Note: All responses are confidential and are further coded to prevent chance identifications. The results of this study will be of value to classroom teachers and reports will be made available to interested participants. Without the cooperation of teachers, this research could not be done.

We are all familiar with the fact that equally effective teachers do not necessarily have identical views on the degree of importance of various class conditions. A classroom element which seems quite important to one teacher may seem less important to another. All the items were originally suggested by classroom teachers. Since this is a study to understand the differences in teacher opinion, you are asked to read all the statements about class conditions and then judge the importance of each to you. We are just interested in your own personal opinion, whatever it may be.

The statements are printed on separate cards so that you can easily shift them around until the order suits you. The steps in the task are as follows:

1. Take all of the forty cards and read them over before you do anything with them.

2. Now, taking the most obvious statements first, start to make a rough sort so that you have four piles of cards:

   In Pile One: Are those statements which you feel are very or most important for an optimal class condition.

   In Pile Two: Are those statements which you feel are quite important for an optimal class condition.

In Pile Three: Are those statements which you feel are of some importance for an optimal class condition.

In Pile Four: Are those statements which you feel are of least or no importance for an optimal class condition.

3. And now for the hard part. Continue to check through the statements and shift them from pile to pile UNTIL YOU HAVE SORTED THE FORTY CARDS INTO THE FOUR PILES WITH EXACTLY TEN CARDS IN EACH PILE. You will end up with ten most important in pile two, and so on. Sometimes the forced sorting into four equal piles will push a card into a pile that does not exactly suit you, but please make the best judgment you can for each card.

4. Now you have four equal piles of cards. To make recording easy, there are numbers on the backs of the cards. Please record these numbers in the proper spaces below.

The cards end up this way:

In Pile One are the following numbers (ten only):

_____ _____ _____ _____ _____ _____ _____ _____ _____ _____

In Pile Two are the following numbers (ten only).

_____ _____ _____ _____ _____ _____ _____ _____ _____ _____

In Pile Three are the following numbers (ten only).

_____ _____ _____ _____ _____ _____ _____ _____ _____ _____

In Pile Four are the following numbers (ten only):

_____ _____ _____ _____ _____ _____ _____ _____ _____ _____

Please do not turn the page until
you have recorded your opinions.
Then turn to the next page.

Most teachers have found this next and last part of the sorting a more pleasant task.

1. Please reorder the cards from 1 to 40, using the numbers on the back, so that they are in the original order.
2. The task you completed on page 26, sorting the cards so that ten were in each pile, forced you to distribute the statements in ways which may not best reflect how you feel about each individual item. Now take the cards and distribute them in the same four categories in any concentration you wish. The distributions no longer have to be equal in the various categories.

   It is even conceivable that you might wish all or no cards in any pile if this really accurately represents how you feel. Without looking back at the forced sort, please sort the forty cards so that each statement is in the particular pile which best reflects your opinion. Then record the numbers in the blanks below.

   In Pile One are the following numbers:

   In Pile Two are the following numbers:

   In Pile Three are the following numbers:

   In Pile Four are the following numbers:

A final word: We deeply appreciate your help in this project. Sometimes researchers, even after trying out devices with teachers in pilot studies, miss some of the things which teachers know are important. If you have any comments about the procedure or related matters, please feel free to write your observations on the back of this sheet.

Please put the cards and this sheet in the envelope for return to the investigators.

LIST OF ITEMS IN ORDER PRESENTED

L	1	Organizing lessons so as to obtain maximum pupil activity.
MH	2	Freedom for the student to express his feelings about what goes on in class
L	3	Getting the class interested in a topic before presenting it as a topic for study
D	4	Frequent provision for "individual work time" during which each pupil may engage in projects of his own choice.
D	5	Knowing the test results of each pupil on the range of individual differences.
MH	6	Class conditions which do not create pressure and tension for pupils.
MH	7	A high level of class acceptance and friendliness toward members.
GP	8	A cohesive high morale group spirit in the classroom.
D	9	Having each pupil assist in evaluating and rating himself.
D	10	Not expecting all children to be at or above grade level at the end of the year regardless of the teaching methods used.
L	11	Modifying or eliminating topics which hold little pupil interest.
MH	12	A class in which pupils do not bicker or pick on each other.
GP	13	Opportunity for students serving in class leadership roles.
MH	14	All pupils having a clear idea of acceptable vs unacceptable classroom behavior.
L	15	Maintaining continuity between the day to day lessons.

L 16 Teaching so that the pupil immediately sees the value of what he is to learn.

MH 17 Trying to alleviate anxiety.

MH 18 Teacher friendliness toward every pupil.

GP 19 Pupils encouraging each other in their classwork.

MH 20 Class being friendly to pupils who are "different".

D 21 Providing materials which coincide with the ability levels of the children.

L 22 Giving immediate approval when a child does a good piece of work.

D 23 Grouping children for instruction to provide for more successful learning experience.

L 24 Extensive use of a variety of teaching aids, such as: models, posters, movies, recordings, class projects, experiments, etc.

GP 25 Frequent group discussion in class.

GP 26 Pupils being able to talk with each other informally about classroom business.

GP 27 Some class leadership roles decided by class election.

GP 28 Some teacher-group planning of learning activities.

L 29 Spending such time as needed to insure that all pupils have a clear idea of the tasks.

L 30 Keeping the pupil informed on how he is doing.

D 31 Grading pupils on what they do in accord with their capacity.

GP 32 Awareness of friendship patterns in the classroom.

D 33 Giving each pupil some choice in what he will study.

D	34	Planning special work for special (dull, gifted, emotionally disturbed, etc.) pupils.
D	35	Having individualized work programs so each pupil can progress at his own rate.
L	36	Correcting assignments as promptly as possible.
GP	37	Use of student committees in some classroom activities.
GP	38	Some opportunities for students to help each other in their classwork.
MH	39	Pupils feeling friendly to the teacher.
MH	40	Pupils not being afraid of failure.

Code____________________
Date____________________

THE REALITY OF CLASSROOM PRACTICE

University of Michigan Classroom
Research Project

(Note: We solicit your help in this project. All material will be kept confidential and used for research purposes only. The final overall report will be made available to all interested participants.)

Most teachers are interested in handling classroom situations in ways which are most helpful to their students and, as often as they can, they do just this. Many times, however, they are subject to pressures and stresses in actual day to day school situations which make it necessary to develop reasonable and practical solutions rather than ideal ones.

This portion of the research project is aimed at discovering what teachers find they are actually able to do when they face certain classroom situations.

To this end, a set of classroom situations is presented on the attached pages. Of course, some will be more important to you than others; all of us 'tolerate' certain conditions and work very hard to do something about other conditions. Thus, your responses may differ from item to item.

Keeping in mind the pressures and barriers within which you actually operate as a teacher, please respond to each problem situation in the following manner:

> In a brief statement indicate what you actually do when confronted with the given classroom situation. Try to describe the actual operation. For instance, if you would talk to a pupil, indicate the type of thing you would say, etc.

Remember that your 'solution' may range from ignoring to a sustained effort, depending both upon how important the issue is and what opportunities are available to you to work problems through.

1. You have a student who gets his work all done, and done well, far ahead of the rest of the class. How do you deal with this situation?

2. You have noticed that a particular pupil is obviously rejected by his classmates. How do you deal with this situation?

3. For a valid reason (i.e., sickness, temporary extra duties assigned you, etc.) you have found yourself a few days behind in checking the papers you had collected. How do you deal with this situation?

4. It is the time for grading and the question of promotion has come up for three pupils. Their achievement is far below all others in the class. How do you deal with this situation?

5. You see a pupil who is not doing the assignment he is supposed to be doing. How do you deal with this situation?

6. You have noticed that your class has a general attitude of disapproval for those pupils who always prepare their lessons, recite, etc. How do you deal with this situation?

7. The pupils show much tension and anxiety around the time of taking tests. How do you deal with this situation?

8. A pupil has, for some time, been doing very superior work in one area but only average work in another area. How do you deal with this situation?

9. In your class you find several pupils who sometimes lead their classmates astray. How do you deal with this situation?

10. There is an equal division of opinion in class as to which of two possible projects should be selected for study. How do you deal with this situation?

11. The pupils have suggested a topic for study which is unrelated to the present line of work. How do you deal with this situation?

12. You have a class which frequently "falls apart" if you don't exert strong leadership. How do you deal with this situation?

13. You have a pupil who is 'different' and other students tend to make fun of him. How do you deal with this situation?

14. You have noticed that a few of your pupils are not interested in the lesson you are teaching. How do you deal with this situation?

15. You have a pupil who can't seem to understand the class material. How do you deal with this situation?

16. You find that your class is characterized by considerable interpersonal bickering and hostility. How do you deal with this situation?

Code______________________

Date______________________

UNIVERSITY OF MICHIGAN
Classroom Research Project

TEACHER QUESTIONNAIRE - FORM A

The University of Michigan under a grant from the United States Office of Education is conducting basic research in patterns of classroom behavior in public schools. We are trying to discover what conditions go together to make various types of classrooms. Much arm chair speculation can be done, and indeed has been done, regarding classes. In our opinion, a more meaningful approach to the problem is to go directly to the teacher who has the most intimate understanding of classrooms. No one knows better than teachers themselves what classrooms are really like.

All responses, from teacher and pupils alike, are recorded by code number to insure the anonymity of each individual concerned since we are interested in studying classroom behavior in general, and not in any specifically identified classroom. If you think you might wish a report of the results from your own class when the project is over, please keep a record of your code number since this will be the only way to insure proper data identification. No other person will be given your code number.

We understand the effort that this questionnaire involves and we would like to thank you in advance for the help you are giving us in this research.

TEACHER QUESTIONNAIRE

INSTRUCTIONS: Below is a list of questions regarding certain conditions in this classroom. You are asked to judge how frequently they occur. The possible answers you may use are in the answer key located on the right side of each page. They are arranged in order from most frequent (always) to least frequent (never). Each question has a short line at the left of the number. After you have read the question and decided on the answer, please place the letter of that answer on the short line.

Answer Key

A. Always
B. Almost always
C. Most of the time
D. Sometimes
E. Seldom
F. Hardly ever
G. Almost never
H. Never

M 1. How often do you find it necessary to devote considerable time to the task of getting the children started on their work?

SS 2. How often do the class members take part in planning the lessons that they personally will study?

ID 3. How frequently are there different assignments for different pupils, even though they are all studying the same subject?

M 4. Does this class seem inattentive?

O 5. How frequently does it happen that the same control or punishment is used for a given type of misbehavior?

ID 6. Does the whole class work on the same assignment at the same time?

F 7. Classes differ on how much they need their work corrected by the teacher in order to keep them motivated. In your opinion, how often does this class need corrected papers returned in order to keep learning efficiently?

A 8. Is the class distracted or interrupted by outside noise, messages, announcements, etc.?

ID 9. How frequently are there times when pupils have to be "pushed" because they are slow or lag behind the class?

ID 10. How often do the faster pupils make it difficult to keep the class moving ahead as it should?

ID 11. Some books above grade level are__________ used in this class to teach lessons. (Which answer best fits?)

O 12. Slow pupils should_________be sent to special classes to help them achieve grade level ability.

CLASSROOM ACTIVITIES

Teachers use a variety of classroom activities as a means of achieving curriculum goals. The type of activities and the extent to which they are used in a classroom might vary from one teacher to another, and from one subject matter area to another.

The purpose of this part of the questionnaire is to determine how often different class activities are used in this class.

Below is a list of classroom activities. Please answer in terms of how frequently these activities have occurred in your class during the current semester.

For each activity listed below, circle one of the following numbers:

1. This activity has occurred at least twice a week.
2. This activity has occurred several times during the semester.
3. This activity has occurred a few times during the semester.
4. This activity has rarely or never occurred during the semester.

G(DM) Code Items 1-23

1. Planning session in which the whole class is involved...1 2 3 4

2. Teacher shows films in class............................1 2 3 4

3. Students work together on a committee to prepare a written report 1 2 3 4

4. Students listen while the teacher discusses or lectures..1 2 3 4

5. General discussion led mostly by the pupils.........1 2 3 4

6. Teacher asks question and calls on pupils............1 2 3 4

7. Field trips...1 2 3 4

8. Students working together in a committee preparing material for class presentation......................1 2 3 4

9. Students get help and instruction from the teacher on an individual basis..............................1 2 3 4

10. Student panel discussions...........................1 2 3 4

11. Students listen to other students recite............1 2 3 4

12. Teacher leads a classroom discussion................1 2 3 4

13. Students organize a group activity with the teacher's help...1 2 3 4

14. Students select topics and make reports about these topics to the class................................1 2 3 4

15. Teacher asks questions and students volunteer answers..1 2 3 4

16. Students work with other students in designing and completing a class project.........................1 2 3 4

17. A student committee goes to the library to do some class research.......................................1 2 3 4

18. The class takes a test on some subject matter.......1 2 3 4

19. Student committee plans a special event for the class 1 2 3 4

20. The teacher gives demonstrations before the class...1 2 3 4

21. **Class discussion in which students participate in setting rules for running the class.............1 2 3 4**

22. **Students nominate and elect classmates for classroom officers.....................................1 2 3 4**

23. **Students help decide the kinds of topics to be learned during the semester........................1 2 3 4**

Code____________________
Date____________________

UNIVERSITY OF MICHIGAN
Classroom Research Project

TEACHER QUESTIONNAIRE - FORM B

The University of Michigan under a grant from the United States Office of Education, is conducting basic research in patterns of classroom behavior in the public schools. We are trying to discover what conditions go together to make various types of classrooms. Much arm chair speculation can be done, and indeed has been done, regarding classes. In our opinion, a more meaningful approach to the problem is to go directly to the teacher who has the most intimate understanding of classrooms. No one knows better than teachers themselves what classrooms are really like.

All responses, from teacher and pupil alike, are recorded by code number to insure the anonymity of each individual concerned since we are interested in studying classroom behavior in general, and not in any specifically identified classroom. If you think you might wish to study the results from your own class when the project is over, please keep a record of your code number since this will be the only way to insure proper data identification. No other person will be given your code number.

We understand the effort that this questionnaire involves and we would like to thank you in advance for the help you are giving us in this research.

TEACHER QUESTIONNAIRE

INSTRUCTIONS: Below is a list of questions regarding certain conditions in this classroom. You are asked to judge how frequently they occur. The possible answers you may use are in the Answer Key located on the right side of each page. They are arranged in order from most frequent (always) to least frequent (never). Each question has a short line at the left of the number. After you have read the question and decided on the answer, please place the letter of that answer on the short line.

Answer Key

A. Always
B. Almost always
C. Most of the time
D. Sometimes
E. Seldom
F. Hardly ever
G. Almost never
H. Never

M 1. How often is this class difficult to get started working?

O 2. How often does this class tend to be unruly?

SS 3. How frequently do the pupils select their own work assignments?

M 4. Do the children see the immediate value of what you are obliged to teach them?

SS 5. When it is necessary to group pupils for specific activities do pupils choose the groups they will be in?

O 6. Some classes relate past material to newly presented material quite readily while others have great difficulty; in this class how much of the time does it seem you are helping them see these relations?

ID 7. Are there some pupils in class who don't have their work completed even though they are given ample time?

O 8. If all have the same general assignment, is its completion required?

O 9. It seems that I________have to give extra help to some pupil who has gotten behind. (Which answer best fits?)

ID 10. It is_________useful to have a few books below grade level to be used to teach regular subjects.

O 11. Different children learn in different ways. For example some children learn best by listening or watching or just thinking while others learn better by taking a more active part in some activity such as class discussion, writing, oral reports, group projects, library research and the like.

In this class, generally speaking, how much of the time actually spent on subject mastery is of this latter nature. I.E. of the active type such as discussion, reporting, group projects, library research and the like?

_____ A. Almost all of the time

_____ B. A good deal of the time

_____ C. A little more than half the time

_____ D. A little less than half the time

_____ E. A small amount of the time

_____ F. Hardly any of the time

TEACHER IMPRESSIONS

Any teacher knows that classes differ among themselves during the same year and from year to year. Some are easy, some difficult and they differ in other ways.

This last part of the questionnaire deals with your impressions of how the members of this class inter-relate with each other and how they feel about class activities.

Below are several short sentences which may describe your class in varying degrees. Read each sentence and then circle one of the following numbers beside each of the sentences:

1. The sentence is highly descriptive of the class.
2. The sentence is fairly descriptive of the class.
3. The sentence is just a little descriptive of the class.
4. The sentence is not descriptive of the class.

__O__ 1. Pupils "pick on" their classmates.................1 2 3 4

__G__ 2. Pupils work harmoniously together on class projects...1 2 3 4

__MH__ 3. Pupils argue with each other.......................1 2 3 4

O 4. Pupils are friendly to the teacher.............1 2 3 4

MH 5. There are discipline problems..................1 2 3 4

O 6. Pupils are friendly to each other..............1 2 3 4

G 7. Pupils seem to do willingly the things the teacher asks them to do.........................1 2 3 4

MH 8. Pupils seem anxious about their classwork......1 2 3 4

G 9. Pupils try to boss each other around...........1 2 3 4

G 10. The pupils continue their work of the teacher leaves the room for a short or long time.......1 2 3 4

G 11. The class members have strong we-feeling and esprit de corps...............................1 2 3 4

G 12. Pupils show willingness to help each other with their classwork...............................1 2 3 4

TEACHER'S GENERAL INFORMATION SHEET

NOTE: In order to make sense of certain data, it is necessary to have a few descriptive statistics about each classroom. Please indicate your answer by checking the appropriate response.

1. Sex: Male_________ Female________
2. Your Age Range: 20's____30's____40's____50's____60's____
3. Marital Status: Married_____Single_____Divorced_____
   Spouce Deceased_____
4. Number of your children, if any_____
   Their age ranges: 1 - 3 yrs._____4 - 6 yrs._____
   12 - 18 yrs._____ Over 18_____

5. **Years Teaching experience:**
Less than 1 full year_____ 1 - 2 yrs._____ 3-6 yrs._____

7-10 yrs._____ 11-20 yrs._____ Over 20 yrs._____

6. **Total graduate credits earned in Education to date:__________**

7. **Graduate credits earned in Education in last three years:____**

UNIVERSITY OF MICHIGAN
Classroom Research Project

PUPIL QUESTIONNAIRE - FORM A

"WHY WE ARE HERE"

We all know that science is very important in modern life. It is the study of the way things happen. For example, science studies such topics as the nations of the stars, the different kinds of materials, and the activities of people.

Some scientists at the University of Michigan are interested in studying the various activities that occur in school in order to discover how to make schools better. We need to learn about the kinds of things that happen in our classroom. Your class has been chosen to take part in this scientific study along with 40 other classrooms in the state of Michigan.

We would like to learn about your class by asking you some questions about what you and your teacher do in school. Everybody knows that all classes are different. There are no right or wrong answers. We simply want to find out what your class is like. No one except the researchers, who are strangers to you, will ever see your answers. As soon as you finish these questionnaires they will be collected and immediately put in an envelope, sealed, and sent to the University of Michigan where each questionnaire will be numbered and your name will be removed.

NAME:____________________

AGE________SEX_______

REMEMBER: After the papers are numbered, this page will be removed from your answer sheets and DESTROYED.

---

*In the original questionnaires, sections were grouped on a page rather than run together as they are here to conserve space.

Code________________
Date________________

HOW OFTEN DO THINGS HAPPEN

INSTRUCTIONS: How often do these activities occur in your class? You may use any of the possible answers in the Answer Key on the right side of the page. The answers are arranged in order of HOW OFTEN THINGS HAPPEN, from "always" to "never". The farther down on the list you go means the less often things happen.

Just before each question is a short line. After you have read the questions look for an answer in the Answer Key. You may not find the exact, special answer you want but pick the answer that most nearly suits you and put the letter of that answer on the short line.

These questions should be answered rather quickly. Your first answer is usually best. So if you come to one you can't make up your mind about, don't waste time with it. Just put down the answer that seems to be most nearly what you think.

Answer Key

A. Always
B. Almost always
C. Most of the time
D. Sometimes
E. Seldom
F. Hardly ever
G. Almost never
H. Never

M 1. How often do you think the work in this class is interesting?

I 2. How often does the teacher teach you brand new things that you never knew before?

A 3. In this class, how frequently are there interruptions when you are trying to work?

O 4. How often do you really know for sure whether your work is right or wrong?

F 5. Will your teacher let you ask a question whenever you want to, when you want to know the answer right away?

NI 6. Just as a guess, how often do the others in your class get mixed up so they are not sure of what they are supposed to do?

ID 7. In your class, how often do all the pupils have different assignments to do?

SS 8. How much of the time can you choose things that just you, yourself, will do in school?

M 9. Do you find yourself getting more interested in your school work after you once get started?

O 10. Do you get to thinking about other things when you are in class and are supposed to be doing your school work?

O 11. Do you start doing your school work before the regular time to begin?

NI 12. How often do you think the pupils in the class wish the teacher would go slower when explaining things?

F 13. How often do you get corrected papers back from your teacher?

F 14. Does the teacher let you know when your work is wrong?

I 15. Do you get mixed up trying to follow what the teacher is telling you to do?

ID 16. How often does your teacher let pupils work ahead of the rest of the class?

SS 17. If you were working with a group and you didn't like the work they were doing, would it be easy for you to change to another group?

NM 18. Just as a guess, how often do you think the other pupils in this class really want to do the work?

O 19. Does the teacher teach you about so many different things that you have a hard time remembering them all?

F 20. When you answer questions or do things in class, how often does the teacher tell you whether you are right or wrong?

ID 21. Does your teacher get upset about pupils who can't do their work even though they try very hard?

O 22. How often does the work in this class seem so easy that you can do it without any trouble at all?

NM 23. As a guess, how often do you think the other pupils like the work in this class?

ID 24. When pupils are working on certain subjects, do they have different kinds of books (some easy - some hard) to work from?

SS 25. How often does the teacher let you pick the work assignment that you want to do?

Please put a check mark on the line in front of the answer that seems most like the way you usually feel.

A 26. Most of the time the work in this class is:

______a. Much too easy
______b. Quite easy
______c. Just about right
______d. Quite hard
______e. Much too hard

About School

Here are some things that could happen in your class. Read each question with me as I read the question aloud. Then check one of the letters right below each question which best tells how things are in class.

There are no right or wrong answers, so answer the way you think things are in class.

Remember to answer each question by checking only one of the letters (A, B, C, or D) below each question.

1. Of all the friends I have
PA

_____A. almost all are in this class.
_____B. some are in this class.
_____C. only a few are in this class.
_____D. Hardly any are in this class.

2. If the class had leaders who helped run the class, who would
DM decide what pupils would be leaders?

_____A. Just the teacher.
_____B. The teacher with a little help from the class.
_____C. The teacher with a lot of help from the class.
_____D. Just the class by itself.

3. When I go to the next grade, or enter a new class
C

_____A. I would like most of my classmates to go with me.
_____B. I would like just some of my classmates to go with me.
_____C. I would like just a few of my classmates to go with me.
_____D. I would not like any of my classmates to go with me.

4. In your class, how often do classmates get angry at each other?
AG

_____A. Much of the time.
_____B. Some of the time.
_____C. A little of the time.
_____D. Hardly ever.

5. If the class members had some ideas on how the class should be
DM run, what would the teacher do?

_____A. Not pay any attention to what they say.
_____B. Pay just a little attention to what they say.
_____C. Pay some attention to what they say.
_____D. Pay a lot of attention to what they say.

6. How often have you had a chance to lead the class as a group
O chairman or something like that?

_____A. Many times.
_____B. Sometimes.
_____C. Just a few times.
_____D. Hardly ever.

7. If I had my way, I would
O

_____A. quit school today.
_____B. go to school for a little more.
_____C. go to school for a while more.
_____D. go to school for as long as I can.

8. If I did not understand my classwork, I think
Co

_____A. many of my classmates would help me.
_____B. some of my classmates would help me.
_____C. a few of my classmates would help me.
_____D. hardly any of my classmates would help me.

9. If this class were working on a project
Co

_____A. everyone would do his share and help to get the project done.
_____B. we would argue a lot, but somehow we would get the project done.
_____C. we would have a hard time working together and never get the project done.

10. If there were some new rules about how class members should
DM act in class, who would decide what the rules would be?

_____A. Just the teacher.
_____B. The teacher with a little help from the class.
_____C. The teacher with some help from the class.
_____D. The class by itself.

11. School is a place I like to be at
O

_____A. a lot.
_____B. some.
_____C. a little.
_____D. not at all.

(NAME LIST WAS ATTACHED)

How much do you like each one?			
A Lot	Some	A little	Very Little

When you think about other pupils in your classroom, it is natural to like some of these pupils more than others. There is nothing right or wrong about this but just how we feel.

Your job, here, is to decide how much you like each pupil in your class.

Look at the first name on the left side of the paper; then look at the boxes opposite his name. If you like this pupil *a lot*, put a check in the first box; if you like this pupil *some*, put a check in the second box; i you like him *a little*, put a che in the third box; if you like hi *very little*, put a check in the fourth box.

Do not skip any names except your own; when you get to your own name just draw a line throug it. Do not check a name more th once.

Do not ask anyone else what thinks. This is for your own private opinion. NO ONE will be told what you put down.

I would do what they want:			
Almost Always	Sometimes	Once in A While	Hardly Ever

In any class, the pupils usually do what the teacher expects of them. But some of the time they also do what certain other pupils expect of them, or want them to do. Some of your classmates could probably get you to do almost anything they want you to do. You would follow their leadership. In the chart, in column (1) check the names of those you feel this way about.

At the other extreme, some of your classmates would not be likely to get you to do anything they might want you to do. In column (4) of the chart, check the names of those you feel this way about.

In the two columns between, check the names of those who are not really at either extreme--those who can sometimes get you to do what they want (column 2) and those who can get you to do what the want once in a while (column 3

Do not skip any name. When you get to your name, just draw a line through it. Be sure to check each name only once.

(O)

HOW DO YOUR CLASSMATES FEEL?

Classmates may differ from each other in the opinions they hold about what they should or should not do. For example, in one class, most of the pupils may feel that they should try to do well in school sports while in another class very few may feel this way.

While classes may hold different opinions, this does not mean there is any "right" or "wrong" opinion.

Now here is what you are to do. Below are some opinions your classmates may have. Read each sentence with me as I read it aloud. Then check one of the letters to the right of the sentence which best tells how many of your classmates you think have that opinion. Sometimes it will be hard to guess, but make the best guess you can.

Remember, there are pupils in other classes who hold these opinions and other pupils who do not, so answer the way you think your classmates feel. Be sure to check only one of the letters (A,B,C or D) for each question.

1. How many of your classmates feel that--pupils should always
NM try to get the best grades they can?

_____A. Almost all
_____B. A lot
_____C. Some
_____D. Only a few

2. How many of your classmates feel that--pupils should do
O everything the teacher asks?

_____A. Only a few
_____B. Some
_____C. A lot
_____D. Almost all

3. How many of your classmates feel that--pupils should try to
NPA be friendly with all the other members of the class?

_____A. Almost all
_____B. A lot
_____C. Some
_____D. Only a few

4. How many of your classmates feel that--pupils should be
O more friendly with their classmates than with the teacher?

______A. Only a few
______B. Some
______C. A lot
______D. Almost all

5. How many of your classmates feel that--pupils should help
NCo classmates who do not understand the classwork?

______A. Almost all
______B. A lot
______C. Some
______D. Only a few

6. How many of your classmates feel that--pupils should ask
NF the teacher for help when they do not understand something?

______A. Only a few
______B. Some
______C. A lot
______D. Almost all

7. How many of your classmates feel that--it doesn't matter
O about grades as long as you just pass?

______A. Almost all
______B. A lot
______C. Some
______D. A few

8. How many of your classmates feel that--it is best to have
O only two or three real good friends in the class?

______A. A few
______B. Some
______C. A lot
______D. Almost all

9. How many of your classmates feel that--it is all right to
O really like the teacher?

______A. Almost all
______B. A lot
______C. Some
______D. A few

10.
O
How many of your classmates feel that--it is more important for students to be friendly with each other than to learn the classwork?

______A. A few
______B. Some
______C. A lot
______D. Almost all

11.
NM
How many of your classmates feel that--it is best to try to do only the same amount of classwork as everyone else in class does.

______A. Almost all
______B. A lot
______C. Some
______D. A few

How Much Do You Like

Since all people are different, they like different things and they like them in different amounts. We would like to learn **HOW MUCH YOU LIKE** certain things about school. The way to mark this section is this: the more you like something, the more points you give it. The things you like very much, you mark 6. The things you like very little, you mark 1. Of course, you can mark any number from 6 to 1 depending on how much you like that particular item. Mark the number you chose by drawing a circle around it.

(NOTE: These Affect for School Activities were NOT used.)

A. Learning about science and nature.

like a lot 6 5 4 3 2 1 like little

B. Playing games or sports at school.

like a lot 6 5 4 3 2 1 like little

C. Learning how to read and write well.

like little 6 5 4 3 2 1 like a lot

D. Going to school picnics, parties or dances.

like little 1 2 3 4 5 6 like a lot

E. Learning about people and places.

like little 1 2 3 4 5 6 like a lot

F. Learning about arithmetic or mathematics.

like a lot 6 5 4 3 2 1 like little

G. Being at a place where there are many others my own age.

like a lot 6 5 4 3 2 1 like little

H. Seeing friends at school.

like little 1 2 3 4 5 6 like a lot

UNIVERSITY OF MICHIGAN
Classroom Research Project

PUPIL QUESTIONNAIRE - FORM B

"WHY WE ARE HERE"

We all know that science is very important in modern life. It is the study of the way things happen. For example, a science studies such topics as the motions of stars, the different kinds of materials, and the activities of peoples.

Some scientists at the University of Michigan are interested in studying the various activities that occur in school in order to discover how to make schools better. We need to learn about the kinds of things that happen in your classroom. Your class has been chosen to take part in this scientific study along with 40 other classrooms in the state of Michigan.

We would like to learn about your class by asking you some questions about what you and your teacher do in school. Everybody knows that all classes are different. There are no right or wrong answers. We simply want to find out what your class is like. No one except the researchers, who are strangers to you, will ever see your answers. As soon as you finish these questionnaires they will be collected and immediately put in an envelope, sealed, and sent to the University of Michigan where each questionnaire will be numbered and your name will be removed.

NAME:______________

AGE_____SEX___

REMEMBER: After the papers are numbered, this page will be removed from your answer sheets and DESTROYED.

Code____________________
Date____________________

HOW OFTEN DO THINGS HAPPEN

INSTRUCTIONS: How often do these activities occur in your class? You may use any of the possible answers in the Answer Key on the right side of the page. The answers are arranged in order of HOW OFTEN THINGS HAPPEN, from "always" to "never". The farther down on the list you go means the less often things happen.

Just before each question is a short line. After you have read the questions look for an answer in the Answer Key. You may not find the exact, special answer you want but pick the answer that most nearly suits you and put the letter of that answer on the short line.

These questions should be answered rather quickly. Your first answer is usually best. So if you come to one you can't make up your mind about, don't waste time with it. Just put down the answer that seems to be most nearly what you think.

Answer Key

A. Always
B. Almost always
C. Most of the time
D. Sometimes
E. Seldom
F. Hardly ever
G. Almost never
H. Never

M 1. How often do you like the work in this class?

A 2. How often do you really buckle down and do serious work in this class?

O 3. How frequently do you "work ahead" of the rest of the class?

F 4. Just as a guess, how much of the time do the members of your class know whether their work is correct or not?

I 5. Do you know for sure exactly what work you are supposed to do?

O 6. Do you think the work is too hard or too long for a class like this?

ID 7. When pupils get behind in their work, does your teacher get upset?

O 8. How often does the teacher seem to be teaching the "same old things" over and over again?

O 9. Can you leave your seat when you have a good reason?

O 10. Does the teacher give exactly the same work to everybody in the class?

O 11. Do you check papers in class right after you finish doing them?

M 12. How often do you really want to do the work in this class?

A 13. In this class, how often do people disturb you when you are trying to work?

O 14. How frequently does the teacher say things that confuse you or mix you up?

O 15. If you work in groups in class, can you choose the group you work with?

O 16. How much of the time does your teacher correct your work so you know how well you did?

F 17. If you want to know something or have a question to ask about your school work, how often will the teacher let you ask?

N-M 18. Just as a guess, how often do you think the other pupils in this class are really interested in their work?

M 19. Do you keep right on with your work even though you don't have to?

I 20. Does the teacher explain things so fast that the pupils in your class have a hard time understanding.

__F__ 21. Does the teacher let you know when you do a good job?

__O__ 22. Is it hard for you to tell exactly what you are supposed to do in this class?

__SS__ 23. Are you allowed to choose where you will sit during class?

__O__ 24. How often does the work in this class seem so hard that you just give up and stop trying to do it?

Please put a check mark on the line in front of the answer that most seems like the way you usually feel:

__A__ 25. School work in this class is

_____a. Always very hard to do.
_____b. Usually hard to do.
_____c. About right, I can do it if I want to.
_____d. Usually easy.
_____e. Always very easy to do.

ABOUT SCHOOL

Here are some things that could happen in your class. Read each question with me as I read the question aloud. Then check one of the letters right below each question which best tells how things are in class.

There are no right or wrong answers, so answer the way you think things are in class.

Remember to answer each question by checking only one lf the letters (A,B,C or D) below each question.

1. I like
PA

_____A. almost all of the pupils in my class.
_____B. most of the pupils in my class.
_____C. some of the pupils in my class.
_____D. just a few of the pupils in my class.

2. I am happy in school
O

_____A. almost always.
_____B. most of the time.
_____C. some of the time.
_____D. hardly ever.

3. If the class were to study something new, who would decide what
DM would be studied?

_____A. just the teacher.
_____B. the teacher with a little help from the class.
_____C. the teacher with some help from the class.
_____D. just the class by itself.

4. If the class were to have a party some Saturday
C

_____A. I wouldn't miss the party for anything.
_____B. I would go if I did not have anything else to do.
_____C. I probably would not be too interested in going.
_____D. I would not want to go.

5. Some classes are very friendly and others are not. How friendly
PA are the pupils in this class toward you.

_____A. Classmates are very friendly to me.
_____B. Classmates are pretty friendly to me.
_____C. Classmates are a little friendly to me.
_____D. Classmates are not friendly at all to me.

6. If I didn't do well on a test, my classmates
O

_____A. would laugh at me for doing poorly.
_____B. would try to help me so I could do better.
_____C. would not help me in any way.

7. If I had a chance to see a movie, and could get as many free
C tickets for other people as I wanted to

_____A. I would take many classmates with me.
_____B. I would take some of my classmates with me.
_____C. I would take just a few of my classmates with me.
_____D. I would not take any of my classmates with me.

8. How often are you able to get some of your classmates to do the
O things you want them to do?

______A. almost always.
______B. Sometimes.
______C. Once in a while.
______D. Hardly ever.

9. I feel I can trust my teacher
O

______A. very much.
______B. some.
______C. a little.
______D. not at all.

10. Some classes are fun to be in and some are not. I enjoy this
C class

______A. a lot.
______B. some.
______C. a little.
______D. not at all.

ABOUT YOUR TEACHER

Some people just naturally seem to remind us of other people we know. When you think of your teacher, perhaps it makes you think of other people like some of those who are listed below.

Here are some statements about people. Read each one with me as I read aloud. Then put a check in one of the boxes which tells how much each reminds you of your teacher. Check the first box if the statement reminds you a lot of your teacher; check the second box if it reminds you some; check the third box if it reminds you a little; check the last box if the statement does not at all remind you of your teacher. Check only one box for each statement.

		The Statement Reminds me of my Teacher			
		A LOT	SOME	A LITTLE	NOT AT ALL
TA	1. A good friend				
TA	2. A person who scolds				
TA	3. A person who gets angry				
O	4. A person who can take a joke				
O	5. A police officer talking to me about something I did wrong				
TA	6. A person who picks on me				
TA	7. An adult who treats me very well				
O	8. A person who criticizes me				
TA	9. A person who likes to give help				
TA	10. A person whom you like to talk to when you feel unhappy				
TA	11. A person who acts bossy				

	The Statement Reminds me of my Teacher			
	A LOT	SOME	A LITTLE	NOT AT ALL
TA 12. A person who hurts others' feelings				
TA 13. A person who makes me feel important				
TA 14. A person who upsets me				

ABOUT YOUR CLASS

Here are some statements that might remind you of your class. Read each one as I read aloud. Then decide how much it reminds you of your class. Put a check in the first box if the statement reminds you a lot of your class; check the second if it reminds you some; check the third if it reminds you a little; check the last box if the statement does not at all remind you of your class. Check only one box for each statement.

	The Statement Reminds Me of My Class			
	A LOT	SOME	A LITTLE	NOT AT ALL
AG 1. Where people are mean to each other				
PA 2. Where people talk to each other in a friendly way				
PA 3. A place where I have friends.				
O 4. Where people are treated fairly				
Co 5. A place where people try to help each other				
O 6. A place that makes me feel happy				

	The Statement Reminds me of My Class			
	A LOT	SOME	A LITTLE	NOT AT ALL
O 7. A place that can upset me				
AG 8. A place where people pick on each other				

HOW DO YOU FEEL ABOUT THINGS IN CLASS?

I am going to be asking you some questions--questions different from the usual school questions, for these are about how you feel and so these questions have no right or wrong answers.

No one but myself will see your answers to these questions, not your teacher, principal, or your parents. Read each question with me as I read the question aloud. You can answer each question by circling just one of the letters right below the question.

These questions are about how you think and feel and therefore have no right or wrong answers. People think and feel differently. The person next to you might answer a question in one way. You might answer the same question in another way but both would be all right because you feel differently about the matter.

Remember, I shall read each question, including the kinds of answers you can give. Wait until I finish reading the question and then answer. Give only one answer for each question.

1. Do you worry when the teacher says that she is going to ask you
SAn questions to find out how much you know about the lesson?

A. Worry a lot
B. Worry some
C. Worry a little
D. Never worry

2. Do you worry about whether you will be promoted, that is, passing
SAn from this class to the next class at the end of the year?

- A. Worry a lot
- B. Worry some
- C. Worry a little
- D. Never worry

3. When the teacher asks you to recite in front of the class, are
SAn you afraid that you are going to make some bad mistakes?

- A. Often
- B. Sometimes
- C. Once in a while
- D. Never

4. When the teacher says that she is going to call on pupils to do
SAn some problems, do you hope that she will call on someone else?

- A. Often
- B. Sometimes
- C. Once in a while
- D. Never

5. Do you dream at night that you are in school and cannot answer
SAn the teacher's question?

- A. Often
- B. Sometimes
- C. Once in awhile
- D. Never

6. When you think you are going to be called on by the teacher, does
SAn your heart begin to beat fast?

- A. Often
- B. Sometimes
- C. Once in a while
- D. Never

7. When the teacher is explaining a hard subject, do you feel that
SAn others in the class understand it better than you do?

- A. Often
- B. Sometimes
- C. Once in a while
- D. Never

8. When you are in bed at night, do you worry about how well you are going to do in class the next day?
SAn

A. A lot
B. Some
C. A little
D. Never

9. When the teacher asks you to write on the blackboard in front of the class, does the hand you write with shake?
SAn

A. Never
B. A little
C. Some
D. A lot

10. Do you think that you worry more about school than other pupils?
SAn

A. A lot more than others
B. More than others
C. A little more than others
D. About the same as others

11. When you are at home and you are thinking about your school work for the next day, do you become afraid that you will get the answers wrong when the teacher calls on you?
SAn

A. Often
B. Sometimes
C. Once in a while
D. Never

12. If you are sick and miss school, are you afraid you will be way behind the other pupils when you return to school?
SAn

A. Very much
B. Some
C. A little
D. No

13. Do you dream at night that others in your class can do things
SAn

A. Often
B. Sometimes
C. Once in a while
D. Never

14. SAn When you are home and thinking about your classwork for the next day, do you worry that you will do poorly on the classwork?

A. Often
B. Sometimes
C. A little
D. Never

15. SAn When you think you are going to be called on by the teacher, do you get a funny feeling in your stomach?

A. Often
B. Sometimes
C. Once in a while
D. Never

16. SAn If you did very poorly when the teacher called on you, did it bother you and make you feel unhappy?

A. Very much
B. Some
C. A little
D. Never

17. TAn Do you dream at night that the teacher is angry because you do not know your lessons?

A. Often
B. Sometimes
C. Once in a while
D. Never

18. TAn Are you afraid of school tests?

A. A lot
B. Some
C. A little
D. Never

19. TAn Do you worry before you take a test?

A. A lot
B. Some
C. A little
D. Never

20. Do you worry while you are taking a test?
TAn

A. A lot
B. Some
C. A little
D. Never

21. After you have taken a test, do you worry about how well you did on the test?
TAn

A. A lot
B. Some
C. A little
D. Never

22. Do you dream at night that you did poorly on a test you had in school that day?
TAn

A. Often
B. Sometimes
C. Once in a while
D. Never

23. When you are taking a test does the hand you write with shake?
TAn

A. A lot
B. Some
C. A little
D. Never

24. When your teacher says that she is going to give the class a test, do you become afraid that you will do poorly?
TAn

A. A lot
B. Some
C. A little
D. Never

25. When you are taking a difficult test, do you forget some things you knew well before you started taking the test?
TAn

A. Often
B. Sometimes
C. Once in a while
D. Never

26. Do you ever wish that you didn't worry so much about tests?
TAn

A. Often
B. Sometimes
C. Once in a while
D. Never

27. When the teacher says she is going to give the class a test, do you get a nervous feeling?
TAn

A. Often
B. Sometimes
C. Once in a while
D. Never

28. While you are taking a test do you usually think you are doing poorly?
TAn

A. Often
B. Sometimes
C. Once in a while
D. Never

29. While you are on your way to school do you worry that you might have a test?
TAn

A. Often
B. Sometimes
C. A little
D. Never

HOW IMPORTANT

We all know people consider some things more important than others regardless of whether they like them or not. The importance of any thing is separate from how much we like it. Please mark HOW IMPORTANT YOU THINK it is for you to do each statement. Mark 6 if you think it is very important for you to do. Mark 1 if you think it is not so important for you to do. Of course you can mark any number from 6 to 1 depending on how much importance you give to that particular item. Mark the number you choose by drawing a circle around it.

(NOTE: Value for school experiences NOT USED.)

A. Learning about science and nature.

Very important 6 5 4 3 2 1 Not so important

B. Playing games or sports at school.

Very important 6 5 4 3 2 1 Not so important

C. Learning how to read and write well.

Not so important 1 2 3 4 5 6 Very important

D. Going to school picnics,
parties or dances.

Not so important 1 2 3 4 5 6 Very important

E. Learning about people and places.

Not so important 1 2 3 4 5 6 Very important

F. Learning about arithmetic or mathematics.

Very important 6 5 4 3 2 1 Not so important

G. Being at a place where there are many others my own age.

Very important 6 5 4 3 2 1 Not so important

H. Seeing friends at school

Not so important 1 2 3 4 5 6 Very important

OBSERVATION GUIDE

DESIGN

An observation of a class will consist of three successive five minute periods with ratings being made at the end of the second and third periods. The procedure is as follows.

Arrangements to visit the class will have been prearranged therefore all that is necessary is to enter the room as unobtrusively as possible, greeting the teacher with a smile or not if appropriate. Take a seat in the rear of the room. After seating yourself, start your stop watch. During this 5 minute period fill out the appropriate data on the heading of the rating sheet and then wait for the end of the first 5 minute period. The purpose of this initial wait is to allow the class to return to normal operation following your entrance. Do not attempt to observe the class during this period. Maintain as much psychological distance from the class as possible. After the first 5 minute period is over, reset your watch and observe for 5 more minutes. At the END of this second period stop your watch and rate every item on the sheet. Use an X to indicate ratings you are reasonably confident about; use a ? to mark the ratings you are dubious about because of lack of evidence for such a judgment. Now turn to the second rating sheet. Enter the data on the heading and then start your watch. Observe during the third 5 minute period. After the third period, make your second series of ratings. Then leave the room as unobtrusively as possible; thank the teacher if she acknowledges your exit.

EXPLANATION OF TERMS

HEADING

Fill in the code number of the class to be observed. Enter date. Enter last name of the observer. Circle the appropriate number and letter to indicate what series of observations is being made. i.e., 1st, 2nd, or 3rd of a series and whether it is part A or B of that series. Circle the appropriate time number. 9 means any time from 9:00 to 9:59; etc. The number circled corresponds to the period in which the major portion (1/2 or more) of the actual observing was done. (Remember there are only two 5 minute intervals of actual observation.) Name the subject being taught at the time you are filling out the heading. For example: arithmetic, spelling, geography, civics, etc. If the class is in transition from one subject to another, so indicate.

Indicate the place of the instruction. The abbreviations are as follows:

Info: Content information being presented to pupils--may be by teacher, pupil, guest, etc.

X: A further explanation or clarification of the subject by anyone in charge.

Dis: Some form of discussion, not recitation.

Rev: A review of subject by person in charge.

Study: A period of study by the pupils.

Rec: Recitation by the pupils.

Test: A situation in which the pupils are being "tested".

Gp wk: A situation characterized by group work on common project or projects.

LEFT SIDE

Ignore all other behaviors not relavent to this rating. After the observation period, immediately record your ratings. Rather the left side of the sheet first then do the ratings on the right side. The rating are on 5 points ranging from high to low. The abbreviations are as follows:

Motivation - Pupil : the apparent degree to which the pupil is motivated to learn the subject, i.e. how eager, etc.

Motivation T-efforts at : the degree to which the teacher goes out of her way to motivate the pupils to learn. May be evidenced by special effects, comments, enthusiasm, etc.

Info Present rate : the rate at which the information is presented to the pupils i.e. how fast the flow of information.

Info-Absorb rate : the degree to which the pupils seem to be "getting" or "receiving" or absorbing the information presented.

Info Control attempts : the degree to which the pupil or pupils attempt to speed up or slow down or redirect the information presentation.

Feedback Supportive : any response from any person that tends to support the respondant and to perpetuate his tendency to respond academically.

Feedback corrective : any response from any person that tends to correct the factualness of a persons content oriented response.

Feedback punitive : any response from any person that tends to punish and reform a persons response may or may not be subject matter oriented.

Communication : See Dick's list

Teacher Affect : the degree of warmth of the teacher toward the class.

Peer-peer affect : the degree of warmth between pupils.

Comment : enter any comments you might have or any thing that might make this observation typical of the way the class usually is.

RIGHT SIDE

Pupil task relevant activity: The degree of activity the pupil is engaged in that is directly related with what he is supposed to be learning. i.e., pupil activities that are appropriate to the tasks set for him.

Pupil task irrelevant activity : pupil activity that is not related to the task at hand. All extraneous behavior. "Passing notes", "whispering", "mischief making", "playing tricks on people", "doodling", figeting, etc.

O R : after rating the activity indicate whether each is Operant or Respondent pupil behavior, i.e. whether pupil initiates the behavior himself or behaves in response to some external stimulant.

Sense modalities : the various sense modalities a teacher involves in teaching her lesson, i.e., looking, listening, touching, smelling, tasting.

Peer initiated distractations : the extent of distraction from the task initiated by pupils in the classroom, i.e., fights, noises, stealing pencils and other disruptive behaviors.

External distractions : the degree to which the class is distracted from its lesson or work by sources external to the room, i.e., fire engines, P.A. system, messenger from the office, visitor (exclusive of the observer) etc.

Diversity of Materials present : the extent to which there is a diversity of teaching materials present in the room--but not necessarily used. Posters, models, maps, globes, various levels of books, diversity of books, pets, experiments, projects, etc. Diversity not simply amount of one type of material.

Diversity of Materials used: the extent to which a diverse set of teaching materials is actually used.

Diversity of assignments : the extent to which a diversity of assignments is given to the pupils. One single assignment for all pupils is rated low. Different assignments for every pupil is rated high. Any evidence of this diversity is sufficient; the assignments "per se" need not be made during the observation period. Any task given the pupils which requires a pupil to do something related to the lesson is an assignment. A task to close the door is *not* an assignment.

Self Selectivity : the degree to which pupils are allowed to direct their own behavior in class, i.e., the degree to which the behavior in class is self initiated.

OBSERVATIONAL CATEGORIES

Style of Teacher Influence. The observer will focus his attention on the behavior of the teacher that is intended to direct the activity or the group. (There will, of course, be much teacher behavior which can not be described as influence attempts during the observation.) The observer will attempt to infer *the meaning of teacher influences* for the peer group. We shall be concerned with modal impressions during the observation period. The 3 points for the scale are defined below:

1. *No implied autonomy of pupil reaction*. The teacher has no expectation that the group will modify or rebel against the directions but that they will obey or accept suggestions as given.
2. *Implied autonomy of pupil reaction*. The teacher does not assume that the children will obey blindly but rather that they have some power to react, and so attempts to "sell the idea" to them, is polite in making suggestions or requests, or goes into reasons for the suggestions or requests.
3. *Invited autonomy of pupil reaction*. The teacher stimulates reactions to ideas or suggestions presented, asks for opinions, throws decisions or questions back to the group, or offers alternative for selection.

The Teacher Affect Scale. The observer will report his impression of the teacher's affect output toward pupils in class on the friendliness--unfriendliness, acceptance-rejection continuum. The rating is to be based on the entire observational period. The scale consists of 4 points, one of which is to be checked by the observer. The 4 points are defined below:

1. High Positive Affect Loading. Almost all teacher-initiated contacts with students are friendly. Smiles frequently during interaction with students; often willing to joke with them. There is no evidence of hostility, anger or emotionality.

2. Warm and Friendly. Teacher smiles moderately often and may once in a while joke with students. There is a relatively neutral facial expression during most of the period. (No evidence of anger exhibited.)

3. Low Positive Affect to Neutral. Occasionally smiles in forced stereotyped manner; any jokes are on the students. (Little or no evidence of threat or punitiveness either in what is said, in voice quality or facial expression.)

4. Negative Affect. Many of the teacher-to-student contacts suggest threat or punitiveness, anger, and hostility. Evidence noted from flushed face, angry voice, etc. May employ sarcasm. (Does not joke with students; rarely if ever smiles at the students except at their discomfiture.)

The Communication Style category is to be used as an index of the formality of communication as it occurs between classmates and between the teacher and the class. The focus of observation should be on the entire class rather than on any group of peers in the class. The four points for this scale are given below:

1. Pupils talk when they feel like it to their classmates and/or to the teacher; there is confusion and general disorder.

2. Pupils talk when they feel like it but no disorder results; class members listen or speak out at appropriate times with no apparent rules of recognition (raising hands) being used.

3. Everyone signals to the teacher before speaking, but the interaction is quite informal.

4. Communication by the pupils is done only when called upon by the teacher--Communication process is very stiff and formal.

The group structure category deals with the pattern of relationship among peers and the teacher. A distinction is made between functional role interaction, when pupils interact with each other in specified roles to achieve an end result, and in situation of cooperation when there is an actual give and take between peers as they depend on each other to get something done.

Group Structure at Time of Observation.

1. Parallel action: each pupil is working by himself; no peer communication involved; (for example, students working on individual class assignments.)

2. Coaction: students mutually independent of each other in carrying out the activity; no interaction between peers; (for example, students reciting at the request of the teacher.)

3. Interaction: communication between teacher and between the students; each pupil carrier out his appropriate role in the class but there is no direct mutual dependence or cooperation of one student on another in order to complete the task or activity; (for example, a class discussion.)

4. Mutual dependence: each pupil is dependent on others in order to complete some task goal. (For example, a group project in which pupils have interdependent but mutually related contributions to make in order to finish the task.)

SUBJECT: ________________
PHASE: ________________________
INFO X DIS REV
REC STUDY TEST OP WK

CODE____________________
DATE____________________
RECORDER________________

SERIES: 1 2 3 A B
TIME: 9 10 11 12 1 2 3

MOTIVATION

Pupil hi |__|__|__|__| lo

T-efforts at hi |__|__|__|__| lo

INFO INPUT

Present rate hi |__|__|__|__| lo

Absorb rate hi |__|__|__|__| lo

O Control atmpts hi |__|__|__|__| lo

FEEDBACK

Supportive hi |__|__|__|__| lo

Corrective hi |__|__|__|__| lo

O Punitive hi |__|__|__|__| lo

COMMUNICATION
O
_____Confusion and disorder
_____No structure; no disorder
_____Informal communication; structure
_____Formal; strict structure

AFFECT

Teacher hi |__|__|__|__| lo

Peer-peer hi |__|__|__|__| lo

COMMENTS:

ACTIVITY

Pupil
task rel hi |__|__|__|__| l

O task irrel hi |__|__|__|__| l

Sense Modalities hi |__|__|__|__| l

O Distractions
peer initiated hi |__|__|__|__| l

O external hi |__|__|__|__| l

DIVERSITY

Materials present hi |__|__|__|__| l

used hi |__|__|__|__| l

Assignments hi |__|__|__|__| l
double weight

SELF SELECTIVITY
double weight hi |__|__|__|__| l

GROUP STRUCTURE

O _____Parallel activity
_____Coaction
_____Interaction and functional roles
_____Cooperation and interdependence

O AUTONOMY |__|__|__|
None present invi